1068

ACIDIC PRECIPITATION IN ONTARIO STUDY

CUMULATIVE (28 DAY) PRECIPITATION CHEMISTRY LISTINGS 1988

JULY 1990

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CUMULATIVE (28 DAY)

PRECIPITATION CHEMISTRY LISTINGS

1988

Report Prepared by:
Atmospheric Research and Planning Unit
Air Resources Branch
Ontario Ministry of the Environment

ARB-006-90

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RECYCLABLE

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This report was prepared by Diane Green of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Scott Kennedy (in the Southwestern Region), Steve Elliott (in Southeastern Region), Wim Smits (in Northwestern Region), Bill Trayling (Northeastern Region), and J.P. Varto (in Central Region). Sample handling was carried out by Sue Lampinen and Gail Fielding. Chemical analyses were performed at the Laboratory Services Branch under the coordination of Frank Tomassini. Invaluable clerical and computer assistance were provided by Peter Maheras, Joseph Lamb and Roberto Banchon. All enquiries regarding the reported data should be directed to Neville Reid, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 326-1691.

TABLE OF CONTENTS

		Page
PART I	INTRODUCTION	III
PART II	STATION DESCRIPTION AND LOCATION MAP	IV
PART III	CENTRAL REGION CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS	

Station Name	Map Ref. No.	
Campbellford	13	01
Coldwater	12	03
Dorset	20	05
Uxbridge	11	07
Wilberforce	18	09

PART IV	NORTHEASTERN REGION CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS	

Station Name	Map Ref. No.	
Azure Lake	26	11
Bear Island	24	13
Gowganda	25	15
Killarney	23	17
Mattawa	22	19
McKellar	21	21
Moonbeam	27	23
Moosonee	38	25
Turkey Lake	37	27
Whitney	19	29

PART V NORTHWESTERN REGION CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref.No.	Page
Dorion	31	31
Exp. Lakes Area	34	33
Ear Falls	35	35
Geraldton	30	37
Lac La Criox	33	39
Pickle Lake	39	41
Quetico Centre	32	43

PART VI SOUTHEASTERN REGION CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref. No.	
Cloyne	14	45
Dalhouise Mills	16	47
Golden Lake	17	49
Smith's Falls	15	51

PART VII SOUTHWESTERN REGION CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref No.	
Alvinston	05	53
Colchester	01	55
Merlin	02	57
Palmerston	08	59
Port Stanley	03	61
Shallow Lake	09	63
Waterloo	07	65
Wilkesport	04	67

PART VIII QUéBEC INTERCOMPARISON SITE LISTINGS

Station Name	Map Ref. No.	Page
Sutton	n/a	69

PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the results acquired from the APIOS cumulative precipitation sampling network from January 1, 1988 to December 31, 1988. The sampler utilized for collection of wet cumulative deposition is the M.I.C. Type "A" collector (Sangamo). During May to October when precipitation is mainly in the form of rain, the Sangamo collector is equipped with a 34 cm x 61 cm polyethylene bag insert. For snow and snow/rain collection from November to April, deeper collection vessels are utilized (122 cm) with 34 cm x 122 cm polyethylene gas insert. The deeper collection vessel is utilized to reduce snow blow out. The period of accumulation per sample is 28 days.

All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involved checking each record for chemical analysis integrity (e.g. ionic balance, observed vs. theoretical conductance). Gross limits checks were applied to the results. Upper limits were determined as M + 2S where median (M) and scale (S) represent robust estimates of the mean and standard deviation respectively. Scale of the distribution was estimated from interquartile distance, i.e. S = 0.74 (3rd quartile - 1st quartile) based upon logarithmetic transformed results. In a situation where the distribution is significantly bounded by reported detection limits, S may be estimated as follows, S = 1.48 (3rd quartile - 2nd quartile). Lower gross limits were specified by the above method except for those parameters with minimum values near or at the detection limits (Cl, Mg, K, Na, Ph, Mn, Ni, Pb, V, Al, Cu, Zn, Fe, Cd). For these parameters a lower gross limit of zero was utilized. The data were also screened for outliers statistically by applying the Dixon Ratio test to the highest and lowest values observed in each

region on a monthly basis. Outliers were determined at the 95% level of confidence. Records and/or results deemed unreliable are flagged but not deleted. Detailed description of the validation procedures as applied to this data set is available from the Ministry upon request.

Station Identification

The station identification is defined by four descriptive fields (e.g., Dorset/Cumulative/Wet #20). The first field refers to the sampling location. The second and third fields describe the sampling internal and the sampling type (e.g., wet or dry) respectively. The last numeric field refers to the index code utilized on the location map. All precipitation chemistry listings are given in alphabetical order by station name within each region.

Cumulative Precipitation Chemistry Listings

Sample type, as coded in the data listings, represents the state of the collected sample at time of removal. The sample date represents the date on which the sample was removed from the sampler. All chemical analyses were done on unfiltered samples. Lab pH entries represent pH measurements obtained at the MOE Laboratory in Toronto.

Total hydrogen ion concentration is reported for either titration of the sample with NaOH to an end point pH of 8.3 or gran analysis titration. For a complete outline of lab analytical methodology please consult the Ontario Ministry of the Environment report "Outlines of Analytical Methods" coordinated by Water Quality Section, Laboratory Services Branch, June 1981.

Of the reported metals, aluminum, copper, iron and zinc were found to display significant adsorptive losses. As a result, a leach solution of 5% HNO_3 (1 litre) is placed in the emptied collection bag for 24 hours. The leach solution is then analysed for the above metals and a final metal concentration is then calculated. Prior to 1986, in the calculation of final metal concentration, if a detection limit (<T) was encountered, a value corresponding to one half the detection limit was utilized. As of 1986, <T values are no longer halved in these calculations.

Co-located with each sampler is a cumulative precipitation gauge which serves as a primary standard of precipitation during the collection period. However, if the cumulative gauge depth is missing or is thought to be inaccurate, then an approximate precipitation depth is determined. The approximation is made by accumulating the surrounding CLIMAT* station daily depth gauge results individually and then interpolating using a modified kriging method (1) to the APIOS station. Sometimes precipitation gauge results cannot be calculated by the above method, in which case the data are missing in the tables to follow.

Calculation of Equivalent Precipitation Depth (mm)

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collected (ml)} \times 30.8}{1000}$$

Calculation of Observed Sampling Efficiency

$$\%\ \text{Efficiency} = \frac{\text{Equivalent Precipitation Depth (mm)} \times 100\ \%}{\text{Gauge Depth (mm)}}$$

Field Comment Code Index

A - Insects in sample
B - Leaves in sample
C - Particulate in sample
D - Fibres in sample
E - Sample not submitted
F - Sampler malfunctioned
G - Sample spilled or leaked
H - Volume incorrect
I - Event(s) missed
J - Wet side open when not precipitating
K - No precipitation collected
L - Part of event missed
M - Dry side open when precipitating
P - Gauge depth incorrect
Q - Other

Office Comment Code Index

C - calculated/observed conductance discrepancy
H - calculated/observed pH discrepancy
J - pH large
M - poor ionic balance
N - abnormal sampler efficiency
T - free hydrogen exceeds total hydrogen
X - sample lost

---*

Environment Canada, Atmospheric Environment Service Meteorological Observations in Eastern Canada, Monthly Record.

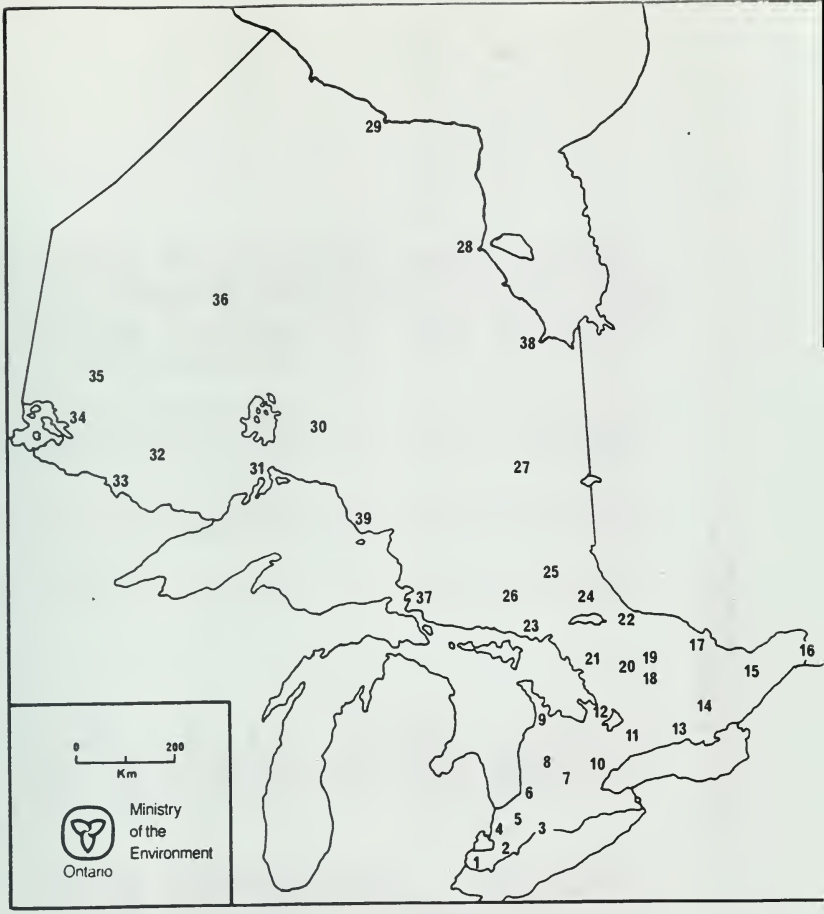
(1) Spatial Trend Analysis and Uncertainly Estimates of Acid Deposition Data in Ontario, A.J.S. Tang and W.H. Chan, reprint #85-6A.6, 78th Air Pollution Control Association Annual Meeting, Detroit, Michigan, June 16-18, 1985.

Analytical Result Remark Code Index

> - actual result greater than value reported
< - actual result less than value reported
T - actual result less than criterion of detection
W - no response, minimum possible result reported
A - approximate value
U - unreliable result
L - bag leach result not available
<L - bag leach result not available and precipitation sample result has been reported as a detection limit
LG - exceedance of lower gross limit checks
UG - exceedance of upper gross limit checks
D - outlier of Dixon Ratio Test
B - exceedance of gross limit checks and outlier of Dixon Ratio Test

PART II

STATION DESCRIPTION AND LOCATION MAP



1. Colchester*
2. Merlin
3. Pt. Stanley*
4. Wilkesport*
5. Alvinston
6. Huron Park
7. Waterloo
8. Palmerston*
9. Shallow Lake*
10. Milton (removed March '84)
11. Uxbridge*
12. Coldwater
13. Campbellford*
14. Cloyne* (repl. Kalladar, June '83)
15. Smith's Falls*
16. Dalhousie Mills*
17. Golden Lake*
18. Wilberforce
19. Whitney
20. Dorset*
21. McKellar*
22. Mattawa*
23. Killarney*
24. Bear Island
25. Gowganda*
26. Azure Lake (repl. Ramsey, June '83)
27. Moonbeam*
28. Attawapiskat (rem. Feb '84)
29. Winisk (rem. Dec '86)
30. Geraldton (replaced Nakina, Aug '83)
31. Dorion*
32. Quetico Centre*
33. Lac la Croix
34. Experimental Lakes Area
35. Ear Falls*
36. Pickle Lake*
37. Turkey Lake*
38. Moosonee* (installed October '85)
39. Otter Island* (summer only)
40. Sutton, Quebec (Intercomparison Site)

* indicates both a wet and dry deposition network site

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS-ACIDIC PRECIPITATION IN ONTARIO STUDY
CUMULATIVE PRECIPITATION SITES

STATION ID	MOE REGION	STATION NAME	ELEV (M)	LATITUDE (NORTH)	LONGITUDE (WEST)	UTM GRID CO-ORDINATES (NORTHING)	(EASTING)
000001-01-01-1041	SOUTHWESTERN	COLCHESTER	183	41°59'15"	82°55'41"	4649973	340284
000001-01-01-1051	SOUTHWESTERN	MERLIN	191	42°14'47"	82°13'28"	4677645	398983
000001-01-01-1061	SOUTHWESTERN	PORT STANLEY	213	42°40'22"	81°09'55"	4724277	486457
000001-01-01-1071	SOUTHWESTERN	WILKESPORT	183	42°42'11"	82°21'13"	4728515	389135
000001-01-01-1081	SOUTHWESTERN	ALVINSTON	221	42°49'00"	81°50'05"	4740580	431759
000001-01-01-1091	SOUTHWESTERN	SHALLOW LAKE	229	44°34'54"	81°06'58"	4936270	490782
000001-01-01-1101	SOUTHWESTERN	PALMERSTON	389	43°48'19"	80°54'12"	4850035	507776
000001-01-01-1191	SOUTHWESTERN	HURON PARK	250	43°17'28"	81°30'03"	4793050	459370
000001-01-01-2021	SOUTHWESTERN	WATERLOO	343	43°28'39"	80°35'10"	4813710	533474
000001-01-01-3011	CENTRAL	DORSET	320	45°13'26"	78°55'50"	5009656	662429
000001-01-01-3061	CENTRAL	UXBRIDGE	244	44°12'46"	79°12'38"	4896847	642958
000001-01-01-3071	CENTRAL	WILBERFORCE	396	45°00'54"	78°12'56"	4988172	719406
000001-01-01-3081	CENTRAL	CAMPBELLFORD	175	44°17'28"	77°47'33"	4907783	277202
000001-01-01-3101	CENTRAL	COLDWATER	280	44°37'31"	79°32'08"	4942152	616174
000001-01-01-4061	SOUTHEASTERN	SMITH'S FALLS	122	44°56'41"	75°57'48"	4977044	423999
000001-01-01-4071	SOUTHEASTERN	DALHOUSIE MILLS	69	45°19'00"	74°28'13"	5018048	541521
000001-01-01-4081	SOUTHEASTERN	GOLDEN LAKE	160	45°36'48"	77°12'03"	5053226	328397
000001-01-01-4091	SOUTHEASTERN	CLOYNE	259	44°49'10"	77°11'07"	4964999	327221
000001-01-01-4161	SOUTHEASTERN	PT.PETRE	84	43°50'20"	77°09'10"	4856016	326930
000001-01-01-5011	NORTHEASTERN	MCKELLAR	244	45°31'15"	79°55'19"	5041158	584196
000001-01-01-5021	NORTHEASTERN	KILLARNEY	183	45°58'20"	81°29'18"	5090859	462167
000001-01-01-5031	NORTHEASTERN	MATTAWA	198	46°16'39"	78°49'19"	5126968	667810
000001-01-01-5041	NORTHEASTERN	BEAR ISLAND	305	46°58'22"	80°04'30"	5202336	570362
000001-01-01-5061	NORTHEASTERN	GOWGANDA	343	47°39'04"	80°46'32"	5277329	516647
000001-01-01-5071	NORTHEASTERN	MOONBEAM	244	49°19'40"	82°01'10"	5464175	425924
000001-01-01-5091	NORTHEASTERN	WHITNEY	412	45°32'21"	78°15'35"	5046283	713946
000001-01-01-5141	NORTHEASTERN	TURKEY LAKES	440	47°03'15"	84°24'20"	5214246	697468
000001-01-01-5151	NORTHEASTERN	AZURE LAKE	427	47°28'13"	81°52'30"	5257579	434062
000001-01-01-5161	NORTHEASTERN	MOOSONEE	8	51°12'35"	80°42'20"	5672970	520568
000001-01-01-6011	NORTHWESTERN	DORION	244	48°50'33"	88°36'45"	5410982	381684
000001-01-01-6031	NORTHWESTERN	EAR FALLS	350	50°38'31"	93°13'13"	5609814	484424
000001-01-01-6041	NORTHWESTERN	PICKLE LAKE	360	51°02'41"	90°12'04"	5658308	696198
000001-01-01-6061	NORTHWESTERN	LAC LA CROIX	368	48°21'14"	92°12'32"	5355719	558611
000001-01-01-6071	NORTHWESTERN	QUETICO CENTRE	420	48°24'44"	91°12'08"	5363461	633036
000001-01-01-6091	NORTHWESTERN	E.L.A.	123	49°39'50"	93°43'16"	5501292	447960
000001-01-01-6111	NORTHWESTERN	OTTER ISLAND	204	48°06'50"	86°04'25"	5329155	568954
000001-01-01-6121	NORTHWESTERN	GERALDTON	350	49°48'18"	86°45'52"	5516758	516950
000001-01-01-7011	QUEBEC	SUTTON	243	45°04'35"	72°40'35"	4993846	682898

PART III

CENTRAL REGION

CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-CE STATION-CAMPBELLFORD MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00094434	AP02548	PR	02	01	JAN 26, 1988	DEC 31, 1987	1900	2050	3			2	36.0	61.09
00094435	AP02548	PR	02	01	FEB 23, 1988	JAN 26, 1988	1720	1900	2			2	66.0	56.14
00094436	AP02548	PR	02	01	MAR 22, 1988	FEB 23, 1988	1615	1720	3			2	11.0	52.36
00094537	AP02639	PR	02	01	APR 19, 1988	MAR 22, 1988	1815	1623	1			3	6.0	.
00094539	AP02639	PR	02	01	MAY 17, 1988	APR 19, 1988	1830	1815	1			3	35.0	53.15
00094564	AP02780	PR	02	01	JUN 15, 1988	MAY 17, 1988	1845	1830	1			3	34.0	.
00094565	AP02780	PR	02	01	JUL 12, 1988	JUN 27, 1988	2215	1515	1			3	14.0	95.70
00024702	AP02898	PR	02	01	AUG 9, 1988	JUL 12, 1988	2100	2215	1			3	29.0	.
00024703	AP02898	PR	02	01	SEP 6, 1988	AUG 9, 1988	0100	2100	1			3	94.0	48.23
00106119	AP03182		02	01	SEP 19, 1988	SEP 6, 1988	1640	1640	1			*	18.2	.
00024704	AP02898	PR	02	01	OCT 4, 1988	SEP 19, 1988	1815	1640	1			3	73.0	86.32
00024705	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1840	1815	1			3	57.0	52.09
00024716	AP02940	PR	02	01	NOV 29, 1988	NOV 1, 1988	1100	1855	1			3	67.0	75.39
00094581	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	1236	1105	3		1	3	65.0	60.60

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00094434		Z	714	20.00		4.62		****		1.90		0.46		0.42	
00094435			1203	32.50		4.29		****		2.40		0.75		0.38	
00094436			187	52.00		4.11		****		4.45		1.41		1.12	
00094537	EK		****	****		****		****		****		****		****	
00094539	ACD	H	604	56.50	UG	6.36		****	UG	11.90	UG	1.88	UG	3.26	
00094564	E		****	****		****		****		****		****		****	
00094565	IQ	Z	435	39.50		4.36		****		6.85		1.02		1.52	
00024702	EF		.	****		****		****		****		****		****	
00024703	Q	N	1463	22.00		4.43		****		2.10		0.30		0.18	
00106119	EF	Z	****	****		****		****		****		****		****	
00024704	F	Z	2038	39.00		4.13		****		3.85		0.51		0.24	
00024705	FJ		958	31.00		4.25		****		2.40		0.67		0.28	
00024716			1627	38.50		4.36		****		3.05		0.57		0.54	
00094581	G		1279	34.00		4.33		****		2.75		0.69		0.64	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=CAMPBELLFORD MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00094434	0.43	D 1.640	0.040	0.065	0.205	0.260	<T 0.002	0.003
00094435	0.35	0.430	0.045	0.030	0.185	0.310	<T 0.006	0.003
00094436	0.58	0.940	0.125	0.045	0.315	0.600	<T 0.008	0.009
00094537	****	****	****	****	****	****	****	****
00094539	D 0.45	U 3.050	B 0.380	D 0.280	UG 0.165	UG 2.660	U 0.345	UG 0.015
00094564	****	****	****	****	****	****	****	****
00094565	0.25	1.280	0.180	0.130	0.090	0.966	0.024	0.012
00024702	****	****	****	****	****	****	****	****
00024703	0.07	0.250	<T 0.025	0.030	<T 0.015	0.226	<W 0.002	0.001
00106119	****	****	****	****	****	****	****	****
00024704	0.14	0.520	0.025	0.030	0.030	0.466	<W 0.002	0.002
00024705	0.14	0.480	0.045	0.030	0.030	0.450	<W 0.002	0.003
00024716	0.21	0.390	0.050	0.030	0.100	0.310	<T 0.004	0.003
00094581	0.45	0.370	0.060	0.050	0.195	0.254	<T 0.005	0.004

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00094434	0.0004	1DT 0.009	0.050	< 0.002	< 0.0004	1DT 0.023	< 0.0005	52.30
00094435	0.0003	1DT 0.008	0.031	0.004	< 0.0004	0.018	< 0.0004	81.70
00094436	0.0006	UG 0.052	0.096	1DT 0.006	< 0.0004	1DT 0.041	1DT 0.0018	118.00
00094537	****	****	****	****	****	****	****	****
00094539	<W 0.0010	B 0.030	1DT 0.121	1DT 0.022	<T 0.0004	<T 0.056	<T 0.0023	27.50
00094564	****	****	****	****	****	****	****	****
00094565	<W 0.0010	<T 0.009	0.082	<T 0.038	<T 0.0004	<T 0.016	1DT 0.0019	79.20
00024702	****	****	****	****	****	****	****	****
00024703	<W 0.0001	0.012	1DT 0.006	|BL ****	<T 0.0001	0.018	<T 0.0106	62.00
00106119	****	****	****	****	****	****	****	****
00024704	<T 0.0002	1DT 0.004	1DT 0.009	|BL ****	<T 0.0001	0.013	1DT 0.0005	104.00
00024705	<T 0.0004	1DT 0.006	1DT 0.010	|BL ****	UG 0.0005	0.033	1DT 0.0005	86.00
00024716	<T 0.0004	0.006	<T 0.020	|BL ****	UG 0.0005	0.029	<T 0.0014	71.70
00094581	<T 0.0006	0.008	<T 0.019	1DT 0.002	UG 0.0005	0.022	<T 0.0011	70.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=COLDWATER MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00076052	AP02475	PR	02	01	JAN 26, 1988	DEC 30, 1987	0800	1520	2			2	43.0	81.08
00076053	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0745	0800	2		1	2	84.0	55.44
00076061	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	0800	0745	3	1		2	13.0	108.75
00076066	AP02552	PR	02	01	APR 19, 1988	MAR 22, 1988	0800	0800	3			2	49.0	82.72
00076076	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	0800	0800	1			3	50.0	87.10
00076084	AP02679	PR	02	01	JUN 14, 1988	MAY 17, 1988	0800	0800	1			3	13.0	85.06
00076089	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	0800	0800	1			3	33.0	89.04
00076093	AP02744	PR	02	01	AUG 9, 1988	JUL 12, 1988	0800	0800	1		1	3	105.0	66.91
00076096	AP02789	PR	02	01	SEP 6, 1988	AUG 9, 1988	0800	0800	1	1		3	151.0	92.71
00076100	AP02823	PR	02	01	OCT 4, 1988	SEP 6, 1988	0800	0800	1			3	54.0	37.07
00076105	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	0800	0800	3			3	90.0	92.19
00076114	AP02924	PR	02	01	NOV 29, 1988	NOV 1, 1988	0800	0800	3			2	84.0	57.49
00042137	AP02940	PR	02	01	DEC 27, 1988	NOV 29, 1988	0845	0800	3			2	55.9	73.89

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00076052	G		1132	13.50	4.53	****	1.15	0.37	0.16
00076053			1512	25.00	4.35	****	1.50	0.65	0.18
00076061			459	26.00	4.48	****	2.10	0.75	0.54
00076066			1316	40.50	4.32	****	4.15	0.83	0.60
00076076			1414	30.00	4.54	****	4.45	0.85	0.76
00076084	A	H	359	LG 6.50	UG 5.39	****	LG 1.00	0.24	0.26
00076089			954	35.00	4.34	****	4.50	0.76	0.80
00076093			2281	58.00	3.97	****	D 6.75	0.69	0.42
00076096	A		4545	21.00	4.40	****	2.60	0.30	0.12
00076100	JQ		650	27.50	4.15	****	3.20	0.44	0.12
00076105			2694	21.50	4.45	****	1.80	0.38	0.18
00076114	G		1539	23.00	4.55	****	2.60	0.53	0.56
00042137	F		1334	14.00	4.62	****	1.55	0.47	0.42

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-CE STATION-COLDWATER MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00076052	0.10	0.390	0.030	<T 0.010	0.035	0.190	0.020	0.001
00076053	0.23	0.260	0.025	<W 0.005	0.095	0.170	<T 0.003	0.001
00076061	0.34	0.480	0.065	<T 0.020	0.135	0.420	<T 0.003	0.004
00076066	0.27	0.740	0.090	0.150	0.155	0.590	0.032	0.006
00076076	0.15	1.120	0.140	0.055	0.045	1.020	<T 0.006	0.011
00076084	<T 0.03	0.310	0.035	0.045	<T 0.015	0.184	<T 0.009	0.003
00076089	0.18	0.970	0.115	0.080	0.055	0.726	0.019	0.009
00076093	0.12	0.740	0.085	<T 0.025	<T 0.020	0.680	<T 0.003	0.003
00076096	UG 0.62	0.440	0.025	<T 0.020	<T 0.025	0.410	0.018	<T 0.002
00076100	0.10	0.280	<T 0.020	<T 0.020	<W 0.005	0.220	<W 0.002	<T 0.001
00076105	0.08	0.190	<T 0.020	<T 0.025	<T 0.010	0.206	<W 0.002	<T 0.001
00076114	0.25	UG 1.370	0.065	UG 0.130	0.405	0.326	0.013	0.004
00042137	0.29	0.380	0.040	0.025	0.100	0.270	<T 0.005	0.003

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00076052	< 0.0002	< 0.002	0.025	0.004	< 0.0004	0.010	1DT 0.0009	52.50
00076053	< 0.0002	< 0.002	0.031	0.004	D 0.0005	1DT 0.012	1DT 0.0002	84.80
00076061	< 0.0002	1DT 0.006	0.027	1DT 0.014	< 0.0004	1DT 0.028	1DT 0.0008	58.60
00076066	0.0004	1DT 0.008	0.033	0.008	< 0.0004	0.016	< 0.0004	84.10
00076076	<W 0.0010	<T 0.011	<T 0.070	1DT 0.005	< 0.0004	0.042	<T 0.0011	55.70
00076084	<W 0.0010	<T 0.011	<T 0.021	1DT 0.042	<T 0.0004	<T 0.019	<T 0.0012	24.40
00076089	<W 0.0010	<T 0.006	0.077	1DT 0.013	<T 0.0004	<T 0.023	<T 0.0016	69.80
00076093	<W 0.0010	<T 0.003	0.033	1DT 0.009	<T 0.0004	<T 0.007	1DT 0.0002	138.00
00076096	<W 0.0010	<T 0.002	<T 0.012	1DT 0.002	<T 0.0004	<T 0.007	<T 0.0007	61.60
00076100	<W 0.0010	1DT 0.002	<T 0.008	<W 0.003	<T 0.0009	<T 0.013	<T 0.0010	97.50
00076105	<W 0.0010	1DT 0.001	<T 0.014	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	60.50
00076114	<T 0.0004	0.020	1DT 0.034	|BL ****	<T 0.0003	0.032	<T 0.0029	54.90
00042137	<T 0.0002	0.006	<T 0.021	|BL ****	<T 0.0002	0.030	<T 0.0014	47.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=DORSET MIC TYPE A SITE NO.1 ---------- ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00076046	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	0900	1000	2			2	81.0	78.33
00076055	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0845	0900	2			2	118.0	77.99
00076058	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	0845	0845	3			2	39.0	78.97
00076063	AP02552	PR	02	01	APR 19, 1988	MAR 22, 1988	0900	0845	3		1	2	81.0	92.86
00076072	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	0900	0900	1			3	74.0	94.77
00076077	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	1100	0900	1			3	13.0	111.35
00076085	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	0940	1100	1			3	37.0	99.56
00076090	AP02744	PR	02	01	AUG 9, 1988	JUL 12, 1988	0940	0940	1			3	54.0	96.68
00076097	AP02789	PR	02	01	SEP 6, 1988	AUG 9, 1988	1200	0940	1			3	109.0	97.43
00076101	AP02823	PR	02	01	OCT 4, 1988	SEP 6, 1988	1000	1200	1			3	77.0	94.36
00076107	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	1000	1000	3			3	113.0	94.74
00076111	AP02898	PR	02	01	NOV 29, 1988	NOV 1, 1988	1340	1000	3			2	9.8	908.29
00076116	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0930	1340	2			3	68.0	71.79

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00076046			2060	23.00	4.25	****	1.60	0.60	0.16
00076055			2988	29.50	4.36	****	2.20	0.86	0.32
00076058			1000	42.50	4.17	****	3.50	1.06	0.48
00076063			2442	40.00	4.21	****	3.70	0.74	0.44
00076072	C	H	2277	20.50	UG 5.01	****	3.55	0.67	0.38
00076077			470	20.00	4.43	****	1.70	0.35	0.10
00076085			1196	21.50	4.45	****	2.40	0.37	0.22
00076090			1695	26.50	4.30	****	3.10	0.44	0.18
00076097	A		3448	28.00	4.19	****	3.10	0.37	0.10
00076101	A	C	2359	22.00	4.26	****	2.85	0.43	0.22
00076107			3476	23.50	4.44	****	1.95	0.43	0.10
00076111	G		2881	27.00	4.31	****	2.20	0.45	0.12
00076116			1578	19.50	4.42	****	1.55	0.51	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

REGION=CE STATION=DORSET MIC TYPE A SITE NO.1

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00076046	0.09	0.340	0.025	<T 0.015	0.035	0.280	<T 0.002	0.001
00076055	0.27	0.540	0.055	<T 0.015	0.135	0.440	<T 0.004	0.002
00076058	0.25	0.750	0.055	0.040	0.085	0.680	<T 0.004	0.004
00076063	0.18	0.610	0.050	0.030	0.090	0.420	<T 0.007	0.005
00076072	0.13	UG 2.040	0.090	UG 0.370	0.035	UG 1.225	UG 0.208	UG 0.007
00076077	<T 0.05	0.310	<T 0.020	0.045	<T 0.020	0.160	0.009	<T 0.002
00076085	0.08	0.400	0.035	0.035	0.025	0.382	<T 0.002	0.003
00076090	0.06	0.450	0.045	0.025	<T 0.010	0.376	<W 0.002	<T 0.002
00076097	<W 0.01	0.330	<T 0.020	<T 0.020	<T 0.020	0.310	0.018	<T 0.001
00076101	0.11	0.350	0.030	0.025	0.035	0.330	<T 0.003	<T 0.002
00076107	0.06	0.300	<T 0.010	0.030	<T 0.020	0.290	<T 0.004	<T 0.001
00076111	0.19	0.290	<T 0.020	<T 0.020	0.070	0.240	<W 0.002	0.001
00076116	0.18	0.250	<T 0.025	<T 0.020	0.045	0.180	<W 0.002	0.002

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00076046	< 0.0002	< 0.001	0.012	0.002	< 0.0004	1DT 0.008	1DT 0.0029	72.80
00076055	< 0.0002	1DT 0.007	0.021	0.002	0.0006	0.018	< 0.0003	81.60
00076058	0.0003	1DT 0.007	0.037	1DT 0.004	< 0.0004	1DT 0.013	< 0.0004	95.80
00076063	< 0.0002	1DT 0.006	0.046	< 0.001	< 0.0004	0.022	< 0.0003	98.60
00076072	<W 0.0010	<T 0.010	<T 0.032	1DT 0.002	<T 0.0004	<T 0.015	<T 0.0006	52.60
00076077	<W 0.0010	1DT 0.003	<T 0.026	<T 0.019	< 0.0004	<T 0.016	1DT 0.0005	60.30
00076085	<W 0.0010	1DT 0.001	1DT 0.028	1DT 0.018	<T 0.0004	<T 0.009	1DT 0.0005	54.10
00076090	<W 0.0010	<T 0.004	<T 0.027	<T 0.023	<T 0.0004	<T 0.008	1DT 0.0002	78.60
00076097	<W 0.0010	<T 0.003	<T 0.016	<T 0.011	<T 0.0004	<T 0.009	1DT 0.0002	87.80
00076101	<W 0.0010	1DT 0.001	<T 0.015	1DT 0.002	<T 0.0004	<T 0.007	<T 0.0008	80.70
00076107	<W 0.0010	1DT 0.001	1DT 0.009	<W 0.001	<T 0.0004	<T 0.006	1DT 0.0002	61.80
00076111	<T 0.0001	1DT 0.003	1DT 0.005	|BL ****	<T 0.0003	0.015	1DT 0.0006	78.00
00076116	<T 0.0004	0.004	<T 0.025	1DT 0.002	<T 0.0003	0.034	<T 0.0012	64.20

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=UXBRIDGE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00040981	AP02468	PR	02	01	JAN 26, 1988	DEC 30, 1987	0840	1330	3			2	26.0	87.66
00084224	AP02475	PR	02	01	FEB 23, 1988	JAN 26, 1988	0730	0840	3		1	2	50.0	69.18
00084253	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	0645	0730	3	1		2	10.0	102.87
00084313	AP02551	PR	02	01	APR 19, 1988	MAR 22, 1988	0645	0645	3			2	59.0	70.94
00084408	AP02595	PR	02	01	MAY 17, 1988	APR 19, 1988	0800	0645	1			3	43.9	111.41
00084492	AP02646	PR	02	01	JUN 14, 1988	MAY 17, 1988	0600	0800	1			3	17.0	131.35
00084502	AP02646	PR	02	01	JUL 12, 1988	JUN 14, 1988	0750	0600	1			3	69.0	80.35
00084586	AP02721	PR	02	01	AUG 10, 1988	JUL 12, 1988	0750	0750	1			3	102.0	69.12
00084766	AP02761	PR	02	01	SEP 6, 1988	AUG 10, 1988	0625	0750	1			3	92.0	78.07
00084826	AP02823	PR	02	01	OCT 4, 1988	SEP 6, 1988	0650	0630	1			3	44.4	122.78
00084907	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	0710	0650	3			1	66.0	74.85
00042104	AP02898	PR	02	01	NOV 29, 1988	NOV 1, 1988	1030	1710	3			2	35.3	180.61
00042132	AP02940	PR	02	01	DEC 29, 1988	NOV 29, 1988	0710	1030	2			2	46.0	78.81

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00040981		H	740	20.00	UG	5.53	****	2.70	0.75	1.50
00084224			1123	26.50		4.41	****	1.90	0.72	0.48
00084253			334	36.00		4.66	****	3.95	1.26	1.48
00084313			1359	28.50		4.62	****	3.55	0.78	0.94
00084408			1589	19.00		4.97	****	3.70	0.71	1.00
00084492		N	725	U 1305.00		4.62	****	2.30	0.42	0.42
00084502	ACD	H	1800	18.50	B	6.03	****	3.65	0.52	0.59
00084586			2289	16.00		4.60	****	2.70	0.43	0.52
00084766			2332	22.50		4.38	****	2.80	0.44	0.28
00084826		NC	1770	20.00		4.26	****	2.80	0.36	0.20
00084907			1604	17.50		4.63	****	1.95	0.47	0.38
00042104		NHM	2067	18.00		4.32	****	1.55	LG 0.30	0.14
00042132	J	Z	1159	20.00		4.62	****	2.05	0.48	0.82

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=UXBRIDGE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00040981	0.98	0.550	0.195	0.035	0.570	0.200	0.033	D 0.020
00084224	0.69	0.310	0.055	<T 0.010	0.420	0.190	<T 0.005	0.002
00084253	UG 1.28	1.060	0.165	0.030	0.750	0.810	<T 0.009	0.009
00084313	0.26	0.740	0.150	0.040	0.150	0.630	0.019	0.006
00084408	0.14	0.980	0.145	0.060	0.035	0.780	0.017	0.012
00084492	0.08	D 0.480	0.040	0.065	<T 0.020	0.374	0.012	0.004
00084502	0.18	1.470	0.075	0.230	0.045	1.200	D 0.089	0.005
00084586	0.08	0.660	0.050	0.050	0.025	0.526	0.017	0.003
00084766	0.07	0.360	0.050	0.030	<T 0.020	0.326	<W 0.002	<T 0.002
00084826	0.07	0.490	0.035	<T 0.025	<T 0.020	0.296	0.018	UG 0.048
00084907	0.20	0.330	0.045	<T 0.020	<T 0.020	0.330	<T 0.003	<T 0.002
00042104	0.16	0.190	<T 0.015	<T 0.005	0.060	0.156	<W 0.002	0.001
00042132	0.68	0.280	0.075	<T 0.020	0.370	0.160	<T 0.002	0.006

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00040981	< 0.0002	1DT 0.007	B 0.177	D 0.009	< 0.0004	B 0.066	< 0.0005	LG 29.70
00084224	< 0.0002	1DT 0.006	0.025	0.006	< 0.0004	< 0.009	1DT 0.0013	70.20
00084253	0.0004	0.017	0.074	0.017	0.0005	1DT 0.057	1DT 0.0181	52.30
00084313	0.0003	1DT 0.009	0.047	0.012	D 0.0009	0.023	1DT 0.0003	53.50
00084408	<W 0.0010	<T 0.010	<T 0.048	<W 0.002	<T 0.0004	<T 0.024	1DT 0.0006	35.70
00084492	<W 0.0010	1DT 0.002	1DT 0.032	1DT 0.020	<T 0.0004	<T 0.012	<T 0.0009	49.90
00084502	<W 0.0010	<T 0.007	<T 0.036	1DT 0.012	<T 0.0004	<T 0.013	1DT 0.0009	26.40
00084586	<W 0.0010	<T 0.004	0.035	1DT 0.008	<T 0.0004	<T 0.008	1DT 0.0004	44.60
00084766	<W 0.0010	<T 0.003	<T 0.024	<T 0.013	<T 0.0004	<T 0.007	1DT 0.0002	69.30
00084826	<W 0.0010	1DT 0.001	0.042	<T 0.006	<T 0.0004	<T 0.008	<T 0.0009	80.20
00084907	<W 0.0010	1DT 0.001	<T 0.025	<W 0.002	0.0033	<T 0.008	1DT 0.0021	49.10
00042104	<T 0.0012	0.014	1DT 0.025	|BL ****	<T 0.0002	0.014	0.0040	58.50
00042132	<T 0.0002	0.007	<T 0.046	|BL ****	<T 0.0002	0.048	<T 0.0016	49.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=WILBERFORCE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00076048	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	1300	1201	2			2	60.0	67.50
00076054	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1230	1300	2			2	113.0	66.34
00076060	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	1320	1230	3			2	12.0	155.28
00076065	AP02552	PR	02	01	APR 19, 1988	MAR 22, 1988	1300	1320	3			2	78.0	59.03
00076071	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	1120	1300	1			3	75.0	71.37
00076079	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	0830	1120	1			3	17.0	35.69
00076087	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	1740	0830	1			3	3.3	701.87
00076092	AP02744	PR	02	01	AUG 9, 1988	JUL 12, 1988	1140	1740	1			3	41.0	6.16
00076095	AP02789	PR	02	01	SEP 6, 1988	AUG 9, 1988	1845	1140	1			3	131.0	89.86
00076102	AP02823	PR	02	01	OCT 4, 1988	SEP 6, 1988	1000	1845	1			3	61.0	94.22
00076106	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	1430	1000	3			3	92.0	81.05
00076110	AP02898	PR	02	01	NOV 29, 1988	NOV 1, 1988	1300	1430	3			2	100.0	83.01
00076115	AP02961	PR	02	01	DEC 29, 1988	NOV 29, 1988	1100	1300	2			3	69.0	67.89

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00076048	JQ		1315	29.00	4.15	****	2.05	0.78	0.24
00076054	G		2434	24.00	4.32	****	2.05	0.74	0.42
00076060		N	605	47.00	4.11	****	3.55	1.21	0.56
00076065	AQ		1495	41.00	4.20	****	3.55	0.71	0.30
00076071			1738	45.00	4.15	****	4.60	0.96	0.44
00076079	IF		197	LG 4.50	UG 5.32	****	LG 0.30	RVU 0.16	<T 0.06
00076087	QP		752	30.00	4.27	****	3.35	0.51	0.28
00076092	I		82	UG 68.00	3.97	****	UG 8.20	UG 1.47	UG 1.06
00076095			3822	21.00	4.32	****	2.35	0.26	<T 0.04
00076102	A	HCM	1866	25.00	4.00	****	3.15	0.49	0.22
00076106			2421	26.00	4.33	****	1.90	0.49	<T 0.10
00076110			2546	26.00	4.33	****	2.65	0.41	<T 0.08
00076115	Q	Z	1503	21.00	4.30	****	1.80	0.53	0.26

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=CE STATION=WILBERFORCE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00076048	0.22	0.360	0.040	<T 0.010	0.105	0.300	<W 0.002	0.002
00076054	0.33	0.460	0.065	<T 0.020	0.190	0.380	<T 0.004	0.003
00076060	0.35	0.720	0.065	0.045	0.175	0.630	<T 0.005	0.005
00076065	0.16	0.660	0.040	0.030	0.075	0.420	<T 0.009	0.003
00076071	0.15	0.910	0.065	0.040	0.030	0.750	<T 0.009	UG 0.007
00076079	<T 0.03	LG 0.130	<T 0.005	<T 0.015	<T 0.015	LG 0.012	<T 0.007	<T 0.001
00076087	0.12	0.690	0.045	0.045	0.030	0.516	0.011	0.004
00076092	0.28	!IS ****	UG 0.250	0.100	0.060	UG 1.220	!IS ****	****
00076095	<W 0.01	0.240	<T 0.010	<T 0.010	<T 0.010	0.256	0.016	<T 0.001
00076102	0.11	0.400	0.035	<T 0.020	0.030	0.360	<T 0.003	<T 0.002
00076106	0.08	0.250	<T 0.010	<T 0.025	<T 0.020	0.246	<W 0.002	<T 0.001
00076110	0.14	0.340	<T 0.015	<T 0.020	0.050	0.270	<T 0.002	0.001
00076115	0.26	0.290	0.040	0.045	0.115	0.198	<W 0.002	0.003

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00076048	< 0.0002	1DT 0.002	0.047	0.006	< 0.0004	1DT 0.015	0.0014	85.80
00076054	< 0.0002	1DT 0.003	0.024	0.003	0.0008	0.017	< 0.0003	58.90
00076060	0.0009	0.010	UG 0.084	0.008	0.0005	1DT 0.034	< 0.0005	109.00
00076065	0.0003	1DT 0.006	0.029	< 0.002	< 0.0004	0.012	< 0.0003	102.00
00076071	<W 0.0010	0.012	<T 0.044	1DT 0.003	<T 0.0008	<T 0.017	<T 0.0013	117.00
00076079	<W 0.0010	1DT 0.016	<T 0.023	1DT 0.011	< 0.0004	<T 0.030	1DT 0.0011	LG 22.60
00076087	<W 0.0010	<T 0.005	1DT 0.016	1DT 0.019	< 0.0004	<T 0.013	<T 0.0022	74.10
00076092	****	****	****	****	****	****	****	UG 152.00
00076095	<W 0.0010	<T 0.002	<T 0.008	1DT 0.006	<T 0.0004	<T 0.007	1DT 0.0002	67.20
00076102	<W 0.0010	1DT 0.001	<T 0.016	<W 0.002	<T 0.0004	<T 0.008	1DT 0.0002	D 127.00
00076106	<W 0.0010	1DT 0.001	<T 0.012	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	71.00
00076110	<T 0.0002	0.005	<W 0.006	!BL ****	<T 0.0003	0.014	<T 0.0005	75.70
00076115	<T 0.0007	0.006	1DT 0.009	0.003	<T 0.0003	0.030	0.0016	78.90

PART IV

NORTHEASTERN REGION
CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=AZURE LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081153	AP02461	PR	02	01	JAN 27, 1988	DEC 30, 1987	1050	1055	2			2	41.1	49.01
00081185	AP02499	PR	02	01	FEB 24, 1988	JAN 27, 1988	1251	1050	2			2	57.1	53.13
00081216	AP02540	PR	02	01	MAR 23, 1988	FEB 24, 1988	1705	1251	2			2	49.0	49.15
00081245	AP02559	PR	02	01	APR 14, 1988	MAR 23, 1988	1630	1705	1			2	136.1	65.92
00081276	AP02601	PR	02	01	MAY 18, 1988	APR 14, 1988	1650	1630	1			3	23.0	151.99
00081313	AP02639	PR	02	01	JUN 14, 1988	MAY 18, 1988	1200	1650	1			3	41.0	74.07
00081355	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	1150	1200	1			3	59.0	91.88
00081405	AP02735	PR	02	01	AUG 10, 1988	JUL 12, 1988	1130	1150	1			3	81.0	102.48
00081457	AP02805	PR	02	01	SEP 6, 1988	AUG 10, 1988	0905	1130	1			3	119.0	86.40
00081493	AP02854	PR	02	01	OCT 5, 1988	SEP 6, 1988	1040	0905	1			3	60.0	94.66
00081525	AP02898	PR	02	01	NOV 1, 1988	OCT 5, 1988	0930	1040	3			2	85.0	52.07
00081556	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	1000	0930	3			2	107.0	25.73
00081583	AP02940	PR	02	01	DEC 29, 1988	NOV 29, 1988	1145	1000	2			2	55.0	21.11

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081153		N	654	17.50	4.39	****	0.85	0.58	0.20
00081185	C		985	29.00	4.22	****	1.75	0.78	0.16
00081216		NHCM	782	23.00	4.52	****	0.50	0.56	0.20
00081245	G	Z	2913	18.50	4.50	****	1.85	0.26	0.12
00081276	C	NZ	1135	19.50	4.62	****	2.55	0.47	0.34
00081313	ACD		986	18.50	B 6.97	****	3.50	0.31	0.30
00081355			1760	14.50	4.65	****	1.60	0.32	0.12
00081405	CD		2695	22.00	4.39	****	2.35	0.40	0.14
00081457		M	3338	13.50	4.78	****	1.50	0.21	<T 0.08
00081493	C		1844	24.50	4.32	****	2.80	0.45	0.20
00081525	Q	N	278	18.00	4.45	****	1.15	0.34	<T 0.04
00081556	G		885	25.00	4.32	****	2.00	0.41	<T 0.10
00081583	G	Z	378	7.00	4.67	****	0.50	0.32	<T 0.04

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=AZURE LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081153	0.14	0.140	0.030	<W 0.005	0.035	0.090	<T 0.002	< 0.001
00081185	0.17	0.400	<T 0.015	<T 0.005	0.045	0.300	<W 0.002	0.002
00081216	0.15	0.370	0.025	<T 0.010	0.090	0.280	<W 0.002	0.002
00081245	<T 0.05	0.250	<T 0.010	<W 0.005	0.030	0.170	<T 0.005	<T 0.002
00081276	0.08	0.510	0.050	0.030	0.050	0.425	<T 0.006	0.006
00081313	0.13	B 2.280	0.095	B 0.810	0.050	UG 1.250	D 0.290	<T 0.002
00081355	0.06	0.410	0.030	0.030	<T 0.020	0.324	<T 0.004	<T 0.002
00081405	0.12	0.510	0.040	0.035	<T 0.025	0.370	D 0.011	0.003
00081457	<W 0.01	0.140	<T 0.020	<T 0.015	0.025	0.190	<T 0.004	<T 0.001
00081493	0.08	0.340	0.025	0.030	<T 0.020	0.330	<W 0.002	0.005
00081525	0.17	0.690	<T 0.010	<T 0.005	UG 0.150	0.040	0.126	0.001
00081556	0.31	0.320	<T 0.010	UG 0.070	0.230	0.140	0.012	0.002
00081583	0.09	0.210	<T 0.010	<T 0.005	<T 0.020	0.150	<T 0.005	0.001

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081153	< 0.0002	1DT 0.002	0.018	< 0.003	< 0.0004	1DT 0.016	< 0.0005	63.80
00081185	< 0.0002	1DT 0.005	0.005	1DT 0.007	< 0.0004	1DT 0.103	1DT 0.0032	91.50
00081216	< 0.0002	1DT 0.003	0.016	1DT 0.006	< 0.0004	1DT 0.011	< 0.0005	62.80
00081245	<W 0.0010	<T 0.004	1DT 0.009	1DT 0.005	<T 0.0004	<T 0.008	1DT 0.0003	52.60
00081276	<W 0.0010	1DT 0.001	<T 0.033	1DT 0.003	<T 0.0004	<T 0.017	1DT 0.0004	53.10
00081313	UG 0.0120	<T 0.011	<T 0.041	<T 0.028	<T 0.0004	<T 0.013	0.0031	LG 24.70
00081355	<W 0.0010	<T 0.003	<T 0.013	1DT 0.011	<T 0.0004	<T 0.008	1DT 0.0002	45.40
00081405	<W 0.0010	<T 0.003	1DT 0.013	1DT 0.008	<T 0.0004	<T 0.009	1DT 0.0004	56.80
00081457	<W 0.0010	1DT 0.001	1DT 0.007	1DT 0.005	<T 0.0004	<T 0.006	1DT 0.0002	39.80
00081493	<W 0.0010	1DT 0.001	0.050	<W 0.002	<T 0.0004	<T 0.008	<T 0.0010	73.60
00081525	<W 0.0001	0.009	<T 0.184	|BL ****	<T 0.0001	UG 0.038	<T 0.0022	64.20
00081556	<T 0.0010	0.028	1DT 0.019	|BL ****	<T 0.0003	0.025	0.0050	79.40
00081583	<T 0.0006	0.009	1DT 0.016	|BL ****	<T 0.0001	0.027	<T 0.0024	40.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-NE STATION-BEAR ISLAND MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH (MM)	EFFICIENCY %
00081155	AP02461	PR	02	01	JAN 4, 1988	DEC 1, 1987	1057	0937	2			2	60.7	65.46
00081156	AP02461	PR	02	01	JAN 26, 1988	JAN 4, 1988	1314	1057	2			2	47.6	50.34
00081186	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1719	1314	2			2	77.6	49.65
00081217	AP02540	PR	02	01	MAR 23, 1988	FEB 23, 1988	1200	1719	2			2	21.2	78.16
00081314	AP02639	PR	02	01	MAY 3, 1988	MAR 23, 1988	0920	1200	1			2	131.5	83.27
00081315	AP02639	PR	02	01	MAY 17, 1988	MAY 3, 1988	1450	0920	1			2	60.2	88.31
00081316	AP02639	PR	02	01	JUN 2, 1988	MAY 17, 1988	1000	1450	1			2	22.2	91.85
00081317	AP02639	PR	02	01	JUN 14, 1988	JUN 2, 1988	0905	1000	1			3	3.0	1.04
00081356	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	1110	0905	1			3	70.0	90.95
00081406	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	1040	1110	1			3	30.0	108.21
00081458	AP02805	PR	02	01	SEP 6, 1988	AUG 9, 1988	1955	1040	1			3	103.0	95.18
00081494	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1820	1955	1			3	110.0	87.33
00081526	AP02898	PR	02	01	NOV 2, 1988	OCT 4, 1988	0945	1820	3		1	3	77.0	92.08
00081557	AP02918	PR	02	01	DEC 5, 1988	NOV 2, 1988	1430	0945	3	1		2	106.0	23.71

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081155	C	Z	1290	17.00	4.57	****	0.75	0.35	<T 0.06
00081156		Z	778	25.50	4.43	****	1.15	0.63	0.10
00081186		N	1251	30.00	4.23	****	1.90	0.77	0.18
00081217			538	36.00	4.28	****	2.40	0.86	0.30
00081314	CD	Z	3555	27.50	4.37	****	3.65	0.59	0.22
00081315	C	Z	1726	LG 15.00	UG 4.73	****	1.95	0.31	0.16
00081316	CD	Z	662	<T 0.50	IU ****	****	IU ****	IU ****	IU ****
00081317		Z	1	****	****	****	****	****	****
00081356	C		2067	23.00	4.41	****	2.75	0.42	0.24
00081406			1054	35.00	4.18	****	4.25	0.62	0.32
00081458	AC	HM	3183	24.50	4.20	****	3.05	<T 0.01	<T 0.08
00081494	C		3119	30.00	4.27	****	3.75	0.49	0.26
00081526		M	2289	50.00	7.64	****	2.85	0.64	3.82
00081557	G	Z	809	24.00	UG 6.88	****	5.20	0.40	0.72

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=BEAR ISLAND MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00081155	<W 0.01	0.130	<T 0.005	<T 0.010	<T 0.010	0.100	<T 0.002	< 0.001
00081156	<T 0.04	0.290	<T 0.015	<T 0.005	0.065	0.230	0.014	0.001
00081186	0.21	0.370	<T 0.025	<T 0.020	0.070	0.280	<T 0.003	0.002
00081217	UG 0.81	0.630	0.045	0.115	UG 0.490	0.400	<T 0.004	0.003
00081314	0.16	0.980	0.040	0.045	0.070	0.684	<T 0.009	0.004
00081315	0.06	0.490	0.040	0.045	0.025	0.364	0.014	0.003
00081316	!U ****	!U ****	!U ****	!U ****	!U ****	!U ****	!U ****	<T 0.001
00081317	****	****	****	****	****	****	****	!RE ****
00081356	0.10	0.510	0.055	0.065	0.030	0.396	0.011	<T 0.002
00081406	0.13	0.880	0.085	0.080	0.050	0.630	0.031	0.004
00081458	0.14	0.350	<T 0.020	0.130	0.100	0.320	D 0.034	<T 0.001
00081494	0.10	0.350	0.045	0.055	<T 0.025	0.476	<W 0.002	0.004
00081526	1.93	2.330	0.630	5.160	0.040	1.060	0.285	0.016
00081557	2.54	UG 7.800	0.435	0.670	1.590	1.200	0.026	0.005

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00081155	0.0003	1DT 0.001	0.019	0.007	< 0.0004	1DT 0.009	0.0040	U 1123.00
00081156	0.0004	1DT 0.006	0.013	0.005	< 0.0004	1DT 0.015	1DT 0.0015	84.40
00081186	< 0.0002	0.005	1DT 0.006	1DT 0.004	< 0.0004	1DT 0.007	1DT 0.0022	94.80
00081217	0.0021	1DT 0.032	0.090	0.006	< 0.0004	1DT 0.028	1DT 0.0046	87.50
00081314	<W 0.0010	<T 0.010	1DT 0.006	<T 0.006	<T 0.0004	<T 0.006	<T 0.0011	76.50
00081315	<W 0.0010	<T 0.003	1DT 0.015	1DT 0.003	<T 0.0004	<T 0.029	<T 0.0012	LG 48.00
00081316	<T 0.0098	UG 0.026	UG 0.128	1DT 0.007	<T 0.0004	<T 0.013	<T 0.0020	!U ****
00081317	!RE ****	!RE ****	!RE ****	!RE ****	!RE ****	!RE ****	!RE ****	****
00081356	<W 0.0010	<T 0.002	<T 0.020	1DT 0.010	<T 0.0004	<T 0.007	1DT 0.0002	63.10
00081406	<T 0.0015	<T 0.005	<T 0.019	1DT 0.010	<T 0.0004	<T 0.010	<T 0.0010	81.20
00081458	<W 0.0010	<T 0.004	<T 0.016	1DT 0.009	<T 0.0004	<T 0.007	<T 0.0007	103.00
00081494	<W 0.0010	<T 0.010	<T 0.014	<W 0.001	<T 0.0004	<T 0.007	<T 0.0006	80.60
00081526	<T 0.0007	0.007	<T 0.027	!BL ****	<T 0.0002	0.019	<T 0.0012	15.90
00081557	UG 0.0027	0.110	<T 0.019	!BL ****	<T 0.0003	0.029	0.0195	27.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=GOWGANDA MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081143	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1020	1010	2			2	32.6	64.34
00081175	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1035	1020	2			2	60.7	48.56
00081206	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1025	1035	2			2	33.9	34.34
00081235	AP02559	PR	02	01	APR 19, 1988	MAR 22, 1988	0908	1025	1			2	128.0	94.66
00081266	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	0710	0908	1			3	74.9	68.55
00081303	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	0710	0710	1			3	10.0	128.44
00081345	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	0807	0710	1			3	61.0	80.28
00081395	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	0703	0807	1			3	108.0	90.83
00081447	AP02805	PR	02	01	SEP 6, 1988	AUG 9, 1988	0850	0703	1			3	95.0	91.17
00081483	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	0841	0850	1			3	62.0	92.30
00081515	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	0829	0841	3		1	2	94.0	77.62
00081546	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	0905	0829	3			2	90.0	68.17
00081573	AP02940	PR	02	01	DEC 27, 1988	NOV 29, 1988	0845	0905	2		1	2	32.0	19.35

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00081143		HM	681	17.00		4.45	****		0.90		0.52		D	0.46
00081175		N	957	23.50		4.27	****		1.65		0.62			0.11
00081206		N	378	30.50		4.28	****		2.25		0.78			0.20
00081235	G		3934	15.50		4.68	****		1.90	LG	0.14			0.16
00081266	C		1667	17.00		4.61	****		2.30		0.28			0.14
00081303	C	N	417	UG 44.50		4.21	****		UG 5.95		0.52			0.48
00081345	C	HM	1590	17.50	B	6.78	****		3.15		0.32			0.14
00081395	C		3185	23.50		4.33	****		2.65		0.32			0.12
00081447			2812	13.00		4.61	****		1.65		0.17		<T	0.06
00081483			1858	29.00		4.34	****		3.10		0.39			0.24
00081515	A		2328	16.00		4.53	****		1.10		0.29		<W	0.02
00081546	G		1988	27.00		4.28	****		1.90		0.45		<T	0.08
00081573	G		52	14.00		4.48	****		0.80		0.47		<T	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=GOWGANDA MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081143	0.05	0.190	0.050	<T 0.005	0.060	0.090	<T 0.009	< 0.001
00081175	0.15	0.280	0.015	<T 0.010	0.045	0.230	<T 0.003	0.002
00081206	0.24	0.570	0.030	<T 0.020	0.125	0.430	0.016	0.002
00081235	0.09	1.190	<T 0.025	<T 0.015	0.035	0.180	<T 0.004	<T 0.002
00081266	<T 0.05	0.620	0.040	0.055	0.030	0.350	0.051	0.003
00081303	0.11	0.830	0.105	0.315	0.030	0.588	0.032	0.011
00081345	0.10	B 2.750	0.045	D 0.435	0.040	B 1.650	D 0.200	<T 0.001
00081395	0.05	0.350	0.035	<T 0.020	<T 0.020	0.306	<W 0.002	<T 0.002
00081447	<W 0.01	0.190	<T 0.010	<T 0.010	<T 0.020	0.176	<T 0.009	<T 0.001
00081483	0.06	0.320	0.030	0.035	0.025	0.310	<T 0.002	0.006
00081515	0.06	0.230	<T 0.005	<T 0.005	<T 0.020	0.130	<W 0.002	0.001
00081546	0.10	0.230	<T 0.010	<T 0.010	0.030	0.150	<W 0.002	0.001
00081573	0.30	!IS ****	<T 0.015	<T 0.015	0.080	0.160	!IS ****	****

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081143	0.0004	1DT 0.003	0.017	1DT 0.004	< 0.0004	1DT 0.022	1DT 0.0011	64.40
00081175	0.0009	0.005	1DT 0.003	0.008	D 0.0009	1DT 0.010	1DT 0.0033	87.90
00081206	0.0003	1DT 0.008	0.019	0.018	< 0.0004	1DT 0.028	< 0.0007	89.00
00081235	<W 0.0010	<T 0.005	1DT 0.014	<W 0.001	<T 0.0004	<T 0.010	1DT 0.0010	43.60
00081266	<W 0.0010	<T 0.010	<T 0.019	1DT 0.005	<T 0.0004	<T 0.013	<T 0.0019	54.90
00081303	B 0.1616	0.032	UG 0.070	<T 0.048	<T 0.0004	<T 0.023	UG 0.0081	UG 101.00
00081345	<W 0.0010	<T 0.005	<T 0.017	1DT 0.016	<T 0.0004	<T 0.008	1DT 0.0005	29.30
00081395	<W 0.0010	<T 0.006	<T 0.010	1DT 0.007	<T 0.0004	<T 0.007	1DT 0.0003	64.60
00081447	<W 0.0010	<T 0.002	1DT 0.005	<T 0.010	<T 0.0004	<T 0.007	1DT 0.0002	51.20
00081483	<W 0.0010	1DT 0.001	1DT 0.021	<W 0.002	<T 0.0004	<T 0.010	<T 0.0017	71.60
00081515	<T 0.0002	1DT 0.002	<W 0.006	|BL ****	<T 0.0000	0.008	0.0012	53.20
00081546	<T 0.0003	0.003	<W 0.006	|BL ****	<T 0.0003	0.009	<T 0.0008	82.70
00081573	****	****	****	****	****	****	****	61.70

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=KILLARNEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081150	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1055	1107	2			2	39.5	64.72
00081182	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1100	1055	2			2	58.9	66.78
00081213	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1115	1100	2			2	34.6	68.99
00081242	AP02559	PR	02	01	APR 19, 1988	MAR 22, 1988	1525	1115	1			2	74.9	85.82
00081273	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	1012	1525	1			3	50.0	98.56
00081310	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	0945	1012	1			3	5.0	104.10
00081352	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	0905	0945	1			3	30.0	85.73
00081402	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	0830	0905	1			3	40.0	94.25
00081454	AP02805	PR	02	01	SEP 6, 1988	AUG 9, 1988	0840	0830	1			3	55.0	92.01
00081490	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1230	0840	1			3	95.0	89.90
00081521	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1300	1230	3		1	3	140.0	90.84
00081553	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	1515	1300	3			2	108.3	88.70
00081580	AP02940	PR	02	01	DEC 28, 1988	NOV 29, 1988	0930	1515	2		1	2	78.1	70.59

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081150		HM	830	24.00	4.28	****	1.30	0.58	0.14
00081182			1277	33.00	4.19	****	2.35	0.84	0.14
00081213			775	47.50	4.20	****	4.05	1.22	0.56
00081242			2087	49.50	4.19	****	4.45	1.01	0.46
00081273	D		1600	34.00	4.35	****	3.85	UG 0.91	0.72
00081310	C		169	23.00	4.57	****	2.75	0.46	0.56
00081352			835	21.50	4.55	****	3.45	0.66	D 0.58
00081402			1224	36.00	4.13	****	4.05	0.58	0.26
00081454		HCM	1643	19.00	UG 4.71	****	2.15	0.33	0.16
00081490	B		2773	25.00	4.35	****	2.35	0.28	0.14
00081521			3154	25.00	4.28	****	2.25	0.60	<T 0.08
00081553			3116	37.00	4.06	****	2.65	0.89	0.18
00081580	C		1787	15.50	4.41	****	1.70	0.57	0.28

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=KILLARNEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081150	<W 0.01	0.340	<T 0.015	<T 0.005	<T 0.015	0.300	<W 0.002	0.001
00081182	0.30	D 0.540	<T 0.020	0.030	0.120	0.450	<T 0.003	0.002
00081213	0.30	0.990	0.085	<T 0.025	0.130	0.850	<W 0.002	0.004
00081242	0.21	0.820	0.050	0.030	0.070	0.740	<T 0.009	0.004
00081273	0.14	0.840	0.110	0.050	0.045	0.725	0.015	0.010
00081310	0.14	0.640	0.135	UG 0.280	0.045	0.200	0.040	****
00081352	D 0.15	D 0.800	D 0.120	0.075	0.040	0.684	<T 0.007	0.005
00081402	0.09	0.600	0.065	0.030	<T 0.025	0.536	<W 0.002	0.004
00081454	<T 0.03	0.250	0.030	<T 0.015	0.025	0.256	<T 0.006	<T 0.002
00081490	0.07	0.230	<T 0.020	0.050	<T 0.020	0.230	<W 0.002	<T 0.001
00081521	<T 0.03	0.400	<T 0.015	<T 0.020	<T 0.005	0.306	<T 0.002	0.001
00081553	0.19	0.400	<T 0.020	0.080	0.135	0.366	<W 0.002	0.002
00081580	0.14	0.360	0.035	0.030	0.050	0.276	<T 0.008	0.003

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081150	0.0003	1DT 0.007	0.010	1DT 0.005	< 0.0004	1DT 0.016	1DT 0.0010	80.70
00081182	< 0.0002	1DT 0.006	0.007	1DT 0.004	< 0.0004	< 0.009	1DT 0.0024	98.70
00081213	0.0010	1DT 0.015	0.052	0.007	0.0004	0.024	1DT 0.0030	102.00
00081242	<W 0.0010	0.012	<T 0.031	<W 0.001	<T 0.0005	<T 0.014	1DT 0.0004	110.00
00081273	<T 0.0013	<T 0.006	<T 0.039	1DT 0.005	<T 0.0004	<T 0.016	<T 0.0011	82.20
00081310	****	****	****	****	****	****	****	66.10
00081352	<W 0.0010	<T 0.004	<T 0.052	1DT 0.056	<T 0.0004	<T 0.011	1DT 0.0003	53.40
00081402	<W 0.0010	<T 0.006	0.030	<T 0.030	<T 0.0004	<T 0.009	1DT 0.0003	90.60
00081454	<W 0.0010	1DT 0.002	<T 0.016	1DT 0.013	<T 0.0004	<T 0.008	<T 0.0007	LG 45.60
00081490	<T 0.0012	1DT 0.001	0.019	<W 0.001	<T 0.0004	<T 0.007	0.0025	70.50
00081521	<T 0.0002	0.005	<W 0.005	|BL ****	<T 0.0001	0.008	<T 0.0007	82.40
00081553	<T 0.0004	0.011	<T 0.011	|BL ****	<T 0.0004	0.019	<T 0.0014	101.00
00081580	<T 0.0007	0.008	<T 0.040	|BL ****	<T 0.0003	0.043	0.0019	63.80

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MATTAWA MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081147	AP02461	PR	02	01	JAN 26, 1988	DEC 30, 1987	1435	1530	2			2	33.1	78.07
00081179	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1330	1435	2			2	75.8	69.40
00081210	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1420	1330	2			2	46.2	69.40
00081239	AP02559	PR	02	01	APR 19, 1988	MAR 22, 1988	1440	1420	1			2	46.8	86.21
00081270	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	1430	1440	1			3	71.8	89.01
00081307	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	1420	1430	1			3	22.0	80.78
00081349	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	1510	1420	1			3	62.0	90.21
00081399	AP02735	PR	02	01	AUG 15, 1988	JUL 12, 1988	1430	1510	1			3	196.0	82.50
00081451	AP02805	PR	02	01	SEP 6, 1988	AUG 15, 1988	1435	1430	1			3	100.0	74.69
00081487	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1035	1435	1			3	87.0	86.06
00081519	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1405	1035	1			2	64.0	82.20
00081550	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	1140	1405	3			2	89.0	88.07
00081577	AP02940	PR	02	01	DEC 29, 1988	NOV 29, 1988	1345	1140	2			2	43.0	73.28

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE MG/L	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081147		M	839	29.00	4.19	****	1.55	0.69	0.20
00081179			1708	33.00	4.19	****	1.95	0.88	0.14
00081210			1041	32.00	4.29	****	1.90	0.74	0.18
00081239			1310	48.00	4.16	****	4.65	0.89	0.58
00081270			2075	24.00	4.42	****	2.55	0.51	0.22
00081307	C	H	577	LG 12.00	UG 5.05	****	LG 1.65	0.26	0.18
00081349			1816	24.50	4.45	****	3.10	0.41	0.22
00081399		Z	5250	29.00	4.20	****	3.05	0.39	0.10
00081451	A	HMZ	2425	38.00	4.16	****	3.90	0.41	<T 0.04
00081487			2431	35.00	4.25	****	3.55	0.56	0.38
00081519			1681	19.00	4.43	****	1.20	0.37	<T 0.06
00081550		C	2538	28.00	4.43	****	1.45	0.31	<T 0.08
00081577		Z	1025	15.00	4.44	****	1.35	0.58	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-NE STATION-MATTAWA MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00081147	<T 0.04	0.530	0.025	<T 0.010	0.050	0.250	<T 0.007	0.002
00081179	0.25	0.360	<T 0.015	<T 0.015	0.090	0.320	<T 0.002	0.003
00081210	0.17	0.400	0.025	<T 0.010	0.060	0.290	<W 0.002	0.002
00081239	0.20	0.660	0.080	0.045	0.065	0.500	0.017	0.006
00081270	0.07	0.550	0.040	0.045	0.030	0.450	0.016	0.004
00081307	0.09	0.520	0.050	UG 0.220	0.030	0.274	0.033	0.006
00081349	0.09	0.550	0.045	0.045	0.025	0.502	<T 0.005	0.004
00081399	0.06	0.350	0.030	0.025	0.025	0.306	<W 0.002	<T 0.002
00081451	UG 0.74	0.260	<T 0.010	<T 0.010	<T 0.015	0.276	<T 0.005	<T 0.001
00081487	0.10	0.360	0.060	0.035	0.030	0.370	<W 0.002	0.004
00081519	0.09	0.250	<T 0.010	0.035	<T 0.025	0.096	<T 0.003	0.001
00081550	0.08	0.150	<T 0.005	<T 0.015	<T 0.025	0.100	<T 0.003	0.002
00081577	0.23	0.380	0.030	0.040	0.115	0.206	0.026	0.007

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00081147	< 0.0002	1DT 0.008	0.036	1DT 0.002	< 0.0004	1DT 0.020	1DT 0.0013	93.20
00081179	< 0.0002	0.008	D 0.016	1DT 0.003	0.0004	< 0.008	1DT 0.0018	98.10
00081210	0.0004	< 0.002	0.022	1DT 0.001	< 0.0004	1DT 0.010	1DT 0.0013	82.70
00081239	<W 0.0010	<T 0.009	0.048	1DT 0.002	<T 0.0004	<T 0.021	0.0031	112.00
00081270	<W 0.0010	<T 0.007	<T 0.026	1DT 0.002	<T 0.0004	<T 0.011	0.0033	70.60
00081307	<W 0.0010	<T 0.008	<T 0.071	1DT 0.054	<T 0.0004	0.026	<T 0.0022	LG 30.70
00081349	<W 0.0010	<T 0.005	<T 0.032	<T 0.012	<T 0.0004	<T 0.008	1DT 0.0002	63.60
00081399	<W 0.0010	<T 0.002	<T 0.013	<T 0.006	<T 0.0004	<T 0.006	1DT 0.0001	79.20
00081451	<W 0.0010	<T 0.003	<T 0.013	<T 0.013	<T 0.0004	<T 0.007	1DT 0.0002	111.00
00081487	<W 0.0010	1DT 0.001	<T 0.030	<W 0.001	<T 0.0004	<T 0.007	<T 0.0007	82.80
00081519	<T 0.0002	1DT 0.002	<W 0.006	|BL ****	<T 0.0000	0.020	1DT 0.0006	63.40
00081550	<T 0.0001	0.002	<T 0.009	|BL ****	<T 0.0001	0.015	<T 0.0010	62.80
00081577	<T 0.0005	0.011	<T 0.144	|BL ****	<T 0.0001	0.105	0.0025	64.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MCKELLAR MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081149	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	0815	0845	2	1	1	2	107.6	58.62
00081181	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	0840	0815	2	1		2	127.5	44.67
00081212	AP02540	PR	02	01	MAR 23, 1988	FEB 23, 1988	0840	0840	2			2	44.0	39.83
00081241	AP02559	PR	02	01	APR 19, 1988	MAR 23, 1988	0835	0840	1		1	2	79.6	79.48
00081272	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	0835	0835	1			2	106.2	35.41
00081309	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	0835	0835	1			3	11.0	75.04
00081351	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	0830	0835	1			3	21.0	40.33
00081401	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	0810	0830	1			3	149.0	80.31
00081453	AP02805	PR	02	01	SEP 6, 1988	AUG 9, 1988	0840	0810	1			3	96.0	89.87
00081489	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	0835	0840	1		1	3	98.0	86.74
00081523	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	0845	0835	1			3	97.0	78.56
00081552	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	0830	0845	3			2	137.0	68.48
00081579	AP02940	PR	02	01	DEC 28, 1988	NOV 29, 1988	0830	0830	2		1	2	74.6	73.00

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00081149			2048	28.00		4.26		****		1.70		0.86		0.38	
00081181		N	1849	34.00		4.21		****		3.00		0.80		0.24	
00081212	F		569	37.50		4.26		****		3.15		0.77		0.24	
00081241			2054	48.00		4.17		****		4.50		0.84		0.44	
00081272		NC	1221	16.50		4.49		****		3.45		0.72		0.58	
00081309	C	C	268	LG 9.00	UG	5.66		****	LG	1.30	LG	0.23		0.36	
00081351	F		275	D 56.00	UG	7.39		****	B	8.80	UG	1.22	UG	1.14	
00081401	CD		3885	40.50		4.11		****		5.15		0.59		0.22	
00081453	D	HCM	2801	LG 15.00		4.45		****		2.40		0.33		0.14	
00081489	A		2760	25.50		4.39		****		2.35		0.38		0.14	
00081523			2437	24.00		4.36		****		2.35		0.48		0.12	
00081552			2956	39.00		4.24		****		1.95		0.51	<T	0.10	
00081579			1772	19.00		4.32		****		1.85	UG	0.69		0.26	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MCKELLAR MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081149	0.22	0.430	0.065	<T 0.010	0.125	0.330	<T 0.004	0.003
00081181	0.37	0.690	0.045	0.030	0.220	0.560	<T 0.004	0.003
00081212	0.14	0.800	0.035	<T 0.020	0.045	0.590	<T 0.003	0.002
00081241	0.20	0.590	0.055	0.045	0.085	0.530	<T 0.005	0.004
00081272	0.11	0.850	0.100	0.040	0.045	0.700	0.016	UG 0.010
00081309	0.09	0.460	0.090	UG 0.245	0.040	0.152	0.035	UG 0.013
00081351	D 0.40	B 5.700	UG 0.275	B 0.885	B 0.135	B 4.530	B 0.385	<T 0.001
00081401	0.11	1.110	0.065	0.105	<T 0.020	0.860	D 0.044	0.003
00081453	0.23	0.740	0.030	0.085	0.040	0.636	D 0.051	0.003
00081489	0.07	0.280	<T 0.025	0.025	0.025	0.296	<W 0.002	<T 0.001
00081523	0.03	0.440	<T 0.020	0.025	<T 0.025	0.320	<W 0.002	0.001
00081552	0.14	0.270	<T 0.015	<T 0.020	0.035	0.256	<W 0.002	0.001
00081579	0.22	0.420	0.035	0.035	0.090	0.340	<T 0.007	0.003

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081149	< 0.0002	1DT 0.003	0.027	0.005	< 0.0004	1DT 0.017	1DT 0.0007	84.40
00081181	< 0.0002	0.006	0.016	1DT 0.004	0.0005	1DT 0.008	1DT 0.0019	97.30
00081212	0.0004	1DT 0.008	0.033	1DT 0.011	< 0.0004	1DT 0.012	1DT 0.0017	90.30
00081241	<W 0.0010	0.011	0.035	1DT 0.005	<T 0.0004	<T 0.014	1DT 0.0004	110.00
00081272	<W 0.0010	<T 0.008	<T 0.091	1DT 0.009	<T 0.0004	<T 0.011	<T 0.0009	90.50
00081309	<W 0.0010	<T 0.011	0.063	1DT 0.075	<T 0.0004	<T 0.026	<T 0.0031	LG 25.80
00081351	<T 0.0028	<T 0.022	B 0.266	1DT 0.142	<T 0.0004	<T 0.034	B 0.0051	LG 24.10
00081401	<W 0.0010	<T 0.006	1DT 0.011	<T 0.007	<T 0.0004	<T 0.006	1DT 0.0002	97.00
00081453	<W 0.0010	<T 0.004	<T 0.008	<T 0.010	<T 0.0004	<T 0.007	1DT 0.0003	65.60
00081489	<W 0.0010	1DT 0.001	<T 0.014	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	66.10
00081523	<T 0.0004	0.004	1DT 0.046	|BL ****	<T 0.0001	0.012	<T 0.0011	72.90
00081552	<T 0.0003	0.004	1DT 0.007	|BL ****	<T 0.0002	0.013	<T 0.0007	73.50
00081579	<T 0.0003	0.007	<T 0.018	|BL ****	<T 0.0003	0.027	<T 0.0011	75.20

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MOONBEAM MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081151	AP02461	PR	02	01	JAN 26, 1988	DEC 30, 1987	1348	1430	2			2	11.1	64.10
00081183	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1430	1348	2			2	45.3	31.68
00081214	AP02540	PR	02	01	MAR 23, 1988	FEB 23, 1988	1050	1430	2			2	52.8	36.05
00081243	AP02559	PR	02	01	APR 19, 1988	MAR 23, 1988	1605	1115	1			2	60.0	68.79
00081274	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	1445	1605	1			3	48.4	87.37
00081311	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	2145	1445	1			3	15.0	113.34
00081353	AP02715	PR	02	01	JUL 18, 1988	JUN 14, 1988	1655	2145	1			3	110.0	89.88
00081403	AP02735	PR	02	01	AUG 14, 1988	JUL 18, 1988	2045	1655	1		1	3	195.0	89.24
00081455	AP02805	PR	02	01	SEP 6, 1988	AUG 14, 1988	1635	2045	1			3	40.0	74.07
00081491	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1855	1635	1			3	55.0	102.76
00081522	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1950	1855	3			2	80.0	48.09
00081554	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	1735	1950	3			2	122.0	59.71
00081581	AP02940	PR	02	01	DEC 28, 1988	NOV 29, 1988	1635	1735	2			2	75.0	19.88

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00081151			231	12.00		4.62		****		0.75		0.46		0.26	
00081183		N	466	16.50		4.51		****		1.15		0.50		<T	0.08
00081214		N	618	19.00		4.65		****		1.70		0.49		0.30	
00081243			1340	34.00		4.26		****		3.25		0.60		0.28	
00081274	A		1373	11.00		4.94		****		1.75		0.20		0.18	
00081311			552	27.50		4.82		****		4.15	UG	0.84	UG	1.00	
00081353	Q	Z	3210	10.50	UG	6.49		****		1.30		0.19		0.28	
00081403			5650	6.50	B	4.86	D	****	B	0.80		0.14		<T	0.04
00081455		CMZ	962	12.50		4.47		****		1.45		0.16		<T	0.04
00081491	A		1835	12.50	B	6.67		****		2.55		0.29		0.56	
00081522		N	1224	12.00		4.60		****		1.10		0.33		<T	0.06
00081554		C	2359	31.00		4.42		****		1.30		0.35		<T	0.04
00081581	P		486	10.50		4.53		****		0.75		0.42		<T	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MOONBEAM MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081151	0.16	0.220	0.040	<W 0.005	0.070	0.100	<T 0.002	0.001
00081183	0.15	0.340	<T 0.015	<T 0.005	0.040	0.280	<T 0.002	0.002
00081214	0.09	0.440	0.040	<T 0.015	0.045	0.330	<T 0.002	0.002
00081243	0.11	0.550	0.040	<T 0.010	0.035	0.440	<T 0.007	0.006
00081274	<T 0.04	0.440	0.035	0.060	0.065	0.275	0.028	0.004
00081311	0.18	1.030	UG 0.155	0.175	0.055	0.856	0.017	0.015
00081353	UG 0.93	UG 1.320	0.080	UG 0.620	UG 0.515	0.410	0.017	0.003
00081403	<W 0.01	LG 0.120	<T 0.015	<T 0.010	<T 0.015	LG 0.090	<W 0.002	<T 0.001
00081455	<T 0.02	0.140	<T 0.015	<T 0.010	0.030	0.156	<T 0.006	<T 0.001
00081491	0.08	D 0.820	0.080	D 0.185	B 0.130	D 0.726	D 0.072	UG 0.017
00081522	0.12	0.360	<T 0.010	<T 0.010	<T 0.010	0.190	<W 0.002	0.001
00081554	0.07	0.150	<W 0.005	<T 0.010	<T 0.020	0.116	<W 0.002	0.001
00081581	0.10	0.190	<T 0.010	<T 0.015	0.045	0.120	<T 0.005	0.001

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081151	0.0002	1DT 0.044	0.026	1DT 0.013	< 0.0004	1DT 0.029	1DT 0.0023	47.60
00081183	< 0.0002	0.006	1DT 0.006	1DT 0.009	< 0.0004	1DT 0.016	1DT 0.0065	59.90
00081214	0.0002	1DT 0.014	0.034	0.012	< 0.0004	1DT 0.013	< 0.0005	47.00
00081243	<W 0.0010	<T 0.009	<T 0.022	<W 0.002	<T 0.0004	<T 0.011	1DT 0.0005	88.10
00081274	<W 0.0010	1DT 0.001	<T 0.022	1DT 0.004	<T 0.0004	<T 0.020	1DT 0.0003	38.20
00081311	<W 0.0010	<T 0.006	<T 0.134	1DT 0.073	<T 0.0004	<T 0.016	<T 0.0014	48.70
00081353	<W 0.0010	0.012	1DT 0.013	1DT 0.013	<W 0.0001	<T 0.007	1DT 0.0006	LG 21.00
00081403	<W 0.0010	1DT 0.001	<T 0.012	1DT 0.007	<T 0.0004	<T 0.007	1DT 0.0002	D 33.40
00081455	<W 0.0010	<T 0.003	<T 0.014	1DT 0.020	<T 0.0004	<T 0.010	<T 0.0019	66.30
00081491	<W 0.0010	<T 0.007	<T 0.048	<W 0.002	<T 0.0004	<T 0.013	1DT 0.0003	LG 20.50
00081522	<W 0.0001	1DT 0.002	<W 0.007	|BL ****	<T 0.0000	0.011	1DT 0.0005	47.80
00081554	<W 0.0001	0.003	1DT 0.008	|BL ****	<T 0.0001	0.009	<T 0.0009	64.00
00081581	<T 0.0002	0.008	<W 0.012	|BL ****	<T 0.0001	0.018	<T 0.0018	48.90

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MOOSONEE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH (MM)	EFFICIENCY %
00081152	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	2035	1730	2			2	48.4	35.51
00081184	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	2030	2035	2			2	24.9	56.03
00081215	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1829	2030	2			2	31.3	42.51
00081244	AP02559	PR	02	01	APR 19, 1988	MAR 22, 1988	2200	1829	3			2	100.2	49.43
00081275	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	1945	2200	1			3	50.0	87.60
00081312	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	1827	1945	1			3	30.0	43.12
00081354	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	2030	1827	1			3	65.0	89.08
00081404	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	1810	2030	1			3	85.0	102.15
00081456	AP02805	PR	02	01	SEP 7, 1988	AUG 9, 1988	1838	1810	1			3	30.0	66.84
00081492	AP02854	PR	02	01	OCT 4, 1988	SEP 7, 1988	1800	1838	1			3	95.0	57.06
00081524	AP02898	PR	02	01	NOV 2, 1988	OCT 4, 1988	1730	1800	3			3	80.0	57.94
00081555	AP02918	PR	02	01	DEC 1, 1988	NOV 2, 1988	1230	1730	3		1	2	115.0	74.56
00081582	AP02940	PR	02	01	DEC 29, 1988	DEC 1, 1988	1215	1230	2	1		2	49.6	33.90

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081152		N	558	11.00	4.67	****	0.65	0.45	0.30
00081184			453	11.00	4.80	****	0.55	0.33	0.18
00081215		NC	432	9.00	4.98	****	0.45	0.22	0.10
00081244	G		1608	8.50	4.86	****	0.80	0.14 <W	0.02
00081275			1422	20.50	4.56	****	3.00	0.32	0.44
00081312		NC	420	67.50 UG	7.82	****	6.55	0.61	2.80
00081354	D		1880	14.50	4.75	****	1.85	0.26	0.22
00081404			2819	6.00	4.98	****	0.70	0.12 <T	0.04
00081456	Q	HCM	651	7.00	4.49	****	1.00	0.18	0.18
00081492			1760	15.50	4.55	****	1.55	0.11 <T	0.06
00081524			1493	UG 19.00 UG	4.72	**** UG	1.30 LG	0.22 LG	0.14
00081555		C	2788	29.00	4.59	****	1.10	0.23 <T	0.06
00081582		N	549	4.00	4.95	****	0.35	0.16 <T	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=MOOSONEE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00081152	0.09	0.190	0.040	<T 0.005	0.065	0.050	<T 0.002	< 0.001
00081184	0.17	0.230	<T 0.020	<W 0.005	0.045	0.120	<W 0.002	0.001
00081215	0.12	0.190	<T 0.020	<T 0.010	0.045	0.100	<W 0.002	0.001
00081244	<T 0.04	0.190	<W 0.005	<W 0.005	<W 0.005	0.140	<T 0.003	<T 0.001
00081275	0.12	0.500	0.055	0.055	0.050	0.350	<T 0.006	0.005
00081312	1.12	UG 5.600	UG 0.620	UG 0.850	0.975	UG 4.070	0.508	<T 0.001
00081354	0.15	0.480	0.050	0.035	0.065	0.342	<T 0.008	0.003
00081404	<W 0.01	0.110	<T 0.015	<T 0.020	<T 0.015	0.070	<W 0.002	<T 0.001
00081456	0.06	0.220	0.035	0.050	0.035	0.180	<T 0.009	0.005
00081492	0.46	<T 0.080	0.040	<T 0.020	0.275	0.116	<W 0.002	<T 0.001
00081524	UG 1.89	LG 0.220	0.165	0.060	UG 1.130	LG 0.096	<T 0.002	UG 0.001
00081555	0.41	0.100	0.025	<T 0.015	0.220	0.086	<W 0.002	0.001
00081582	0.10	<T 0.070	<T 0.015	<T 0.010	0.040	0.036	<T 0.003	0.001

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00081152	0.0007	0.011	0.074	1DT 0.040	< 0.0004	< 0.014	1DT 0.0006	43.70
00081184	< 0.0002	0.003	0.011	1DT 0.016	< 0.0004	< 0.016	1DT 0.0063	41.20
00081215	0.0002	< 0.003	0.022	0.021	< 0.0004	1DT 0.012	< 0.0007	31.70
00081244	<W 0.0010	<T 0.007	1DT 0.007	1DT 0.002	<T 0.0004	<T 0.008	1DT 0.0002	34.30
00081275	<W 0.0010	0.012	<T 0.018	1DT 0.006	<T 0.0004	<T 0.009	<T 0.0010	60.40
00081312	<T 0.0069	0.023	0.108	1DT 0.034	<T 0.0004	<T 0.043	0.0050	<T 3.70
00081354	<W 0.0010	<T 0.008	<T 0.041	0.038	<T 0.0004	<T 0.008	1DT 0.0002	46.80
00081404	<W 0.0010	<T 0.004	1DT 0.004	1DT 0.010	<T 0.0004	<T 0.007	1DT 0.0003	27.90
00081456	<W 0.0010	<T 0.006	1DT 0.013	<T 0.034	<T 0.0004	<T 0.013	1DT 0.0170	59.60
00081492	<W 0.0010	1DT 0.001	1DT 0.005	<W 0.002	<T 0.0004	<T 0.008	<T 0.0005	50.70
00081524	<T 0.0002	UG 0.004	1DT 0.048	|BL ****	<T 0.0000	UG 0.008	1DT 0.0005	UG 40.40
00081555	<W 0.0001	0.003	1DT 0.004	|BL ****	<T 0.0001	0.007	<T 0.0005	47.70
00081582	<W 0.0001	0.006	<W 0.011	|BL ****	<T 0.0000	0.016	<T 0.0015	28.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=TURKEY LAKES MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00081148	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1240	1230	2			2	109.3	71.89
00081180	AP02499	PR	02	01	FEB 23, 1988	JAN 26, 1988	1130	1240	2		1	2	69.3	79.29
00081211	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1000	1130	2			2	73.6	56.24
00081240	AP02559	PR	02	01	APR 19, 1988	MAR 22, 1988	1210	1000	1			2	106.0	81.94
00081271	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	0900	1210	1			2	53.3	74.31
00081308	AP02639	PR	02	01	JUN 14, 1988	MAY 17, 1988	1130	0900	1			3	23.0	76.60
00081350	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	1230	1130	1			3	73.0	84.85
00081400	AP02735	PR	02	01	AUG 9, 1988	JUL 12, 1988	1115	1230	1			3	117.0	97.27
00081452	AP02805	PR	02	01	SEP 6, 1988	AUG 9, 1988	1050	1115	1			3	242.0	85.27
00081488	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1150	1050	1		1	3	129.0	88.44
00081520	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1250	1150	1			2	136.0	89.73
00081551	AP02918	PR	02	01	NOV 29, 1988	NOV 1, 1988	1400	1250	3			2	199.5	80.28
00081578	AP02940	PR	02	01	DEC 27, 1988	NOV 29, 1988	1400	1400	2		1	2	106.5	82.02

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00081148		HM	2551	15.50		4.48	****	0.70	0.39	0.14
00081180	FJ		1784	20.50		4.45	****	1.95	0.64	0.22
00081211	B		1344	29.00		4.58	****	3.05	0.83	0.38
00081240			2820	28.00		4.51	****	2.90	0.63	0.44
00081271	AC	H	1286	20.00		5.30	****	3.45	0.66	B 0.90
00081308	C		572	25.00		4.71	****	3.75	0.64	UG 0.74
00081350			2011	11.50		4.90	****	1.35	0.29	0.18
00081400	D		3695	25.50		4.35	****	3.00	0.48	0.28
00081452		HCM	6700	20.00	D	4.14	****	D 2.60	0.28	0.18
00081488	C		3704	22.50		4.56	****	2.75	0.48	0.58
00081520			3253	14.00		4.58	****	UG 1.25	0.29	<T 0.06
00081551			5317	31.00		4.33	****	1.50	0.37	<T 0.06
00081578	Q		2839	11.00		4.56	****	1.40	0.46	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=TURKEY LAKES MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00081148	<W 0.01	0.260	<T 0.015	<T 0.005	0.035	0.190	<T 0.002	0.001
00081180	0.20	D 0.650	D 0.040	<T 0.020	D 0.090	D 0.440	<T 0.005	D 0.003
00081211	0.17	0.900	0.060	0.035	0.115	D 0.930	<W 0.002	0.005
00081240	0.09	0.610	0.065	0.035	0.040	0.530	0.010	B 0.014
00081271	0.10	UG 1.180	B 0.145	0.135	0.095	0.775	0.048	B 0.017
00081308	0.16	0.860	UG 0.150	0.105	0.060	0.698	<T 0.006	0.011
00081350	0.05	0.450	0.035	0.025	<T 0.020	0.324	<W 0.002	<T 0.002
00081400	0.12	0.560	0.070	0.045	D 0.060	0.456	<T 0.002	0.004
00081452	<T 0.05	0.340	0.035	<T 0.020	<T 0.025	D 0.336	<T 0.005	<T 0.002
00081488	0.08	0.390	0.065	0.075	0.030	0.360	0.017	UG 0.018
00081520	0.07	0.350	<T 0.010	<T 0.020	<T 0.015	0.226	<T 0.002	0.001
00081551	0.06	0.240	<W 0.005	<T 0.010	<T 0.015	0.216	<W 0.002	0.001
00081578	0.11	0.350	<T 0.020	<T 0.020	0.040	0.306	<T 0.003	0.002

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00081148	0.0002	1DT 0.002	0.013	0.027	< 0.0004	1DT 0.009	1DT 0.0005	56.30
00081180	< 0.0002	0.006	0.022	1DT 0.003	< 0.0004	< 0.008	1DT 0.0011	66.20
00081211	0.0004	1DT 0.006	0.038	0.013	< 0.0004	0.015	< 0.0003	53.90
00081240	<W 0.0010	<T 0.008	<T 0.044	1DT 0.002	<T 0.0004	<T 0.023	1DT 0.0004	60.40
00081271	<W 0.0010	<T 0.005	0.047	1DT 0.004	<T 0.0004	<T 0.022	1DT 0.0004	37.20
00081308	<W 0.0010	<T 0.008	<T 0.070	1DT 0.021	<T 0.0004	<T 0.021	<T 0.0023	51.30
00081350	<W 0.0010	1DT 0.001	1DT 0.013	<T 0.019	<T 0.0004	<T 0.007	1DT 0.0003	33.50
00081400	<W 0.0010	<T 0.003	<T 0.014	1DT 0.017	<T 0.0004	<T 0.007	1DT 0.0002	63.20
00081452	<W 0.0010	<T 0.003	<T 0.018	0.030	<T 0.0004	<T 0.008	1DT 0.0001	B 113.00
00081488	<W 0.0010	1DT 0.001	<T 0.007	<W 0.001	<T 0.0004	<T 0.008	1DT 0.0002	52.90
00081520	<W 0.0001	1DT 0.003	<W 0.005	|BL ****	<T 0.0001	0.007	1DT 0.0003	50.80
00081551	<T 0.0002	0.002	1DT 0.005	|BL ****	<T 0.0002	0.005	<T 0.0004	74.80
00081578	<T 0.0001	0.005	1DT 0.007	|BL ****	<T 0.0002	0.017	<T 0.0008	48.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=WHITNEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00076049	AP02456	PR	02	01	JAN 26, 1988	DEC 29, 1987	1335	1330	3			2	51.0	71.81
00076057	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0845	1335	3			2	83.0	66.87
00076062	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	1350	0845	3			2	26.0	90.03
00076070	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	1540	1350	3			2	52.0	88.49
00076082	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	1525	1540	1			3	93.0	91.54
00076083	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	0835	1525	1			3	7.0	141.24
00076088	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	0845	0835	1			3	41.0	101.64
00076094	AP02744	PR	02	01	AUG 9, 1988	JUL 12, 1988	1650	0845	1			3	97.0	93.07
00076099	AP02801	PR	02	01	SEP 6, 1988	AUG 9, 1988	1620	1650	1			3	80.0	96.56
00076104	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	0930	1620	1			3	43.0	117.54
00076109	AP02886	PR	02	01	NOV 2, 1988	OCT 4, 1988	1155	0930	3			3	78.0	95.05
00076113	AP02924	PR	02	01	NOV 29, 1988	NOV 2, 1988	0835	1155	3			2	73.0	83.54
00076122	AP03018	PR	02	01	DEC 28, 1988	NOV 29, 1988	0930	0835	3		1	2	45.0	72.28

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00076049		M	1189	21.50	4.49	****	1.50	0.56	0.18
00076057			1802	24.50	4.28	****	1.60	0.69	0.20
00076062			760	41.00	4.13	****	2.85	1.00	0.38
00076070	A		1494	39.00	4.21	****	3.60	0.73	0.40
00076082			2764	26.50	4.41	****	2.60	0.53	0.28
00076083	Q	NH	321	19.50	UG 5.29	****	2.95	0.58	B 0.90
00076088			1353	21.50	4.49	****	2.50	0.45	0.30
00076094	C		2931	28.00	4.27	****	2.60	0.45	0.18
00076099	A	HCM	2508	26.50	UG 6.77	****	3.25	0.33	0.14
00076104	C	M	1641	22.50	4.36	****	2.75	0.41	0.28
00076109	Q		1837	17.50	4.29	****	1.60	0.42	<T 0.08
00076113		M	1960	26.00	4.36	****	2.47	0.52	0.19
00076122	IQ		1050	16.50	4.44	****	1.35	0.49	0.18

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NE STATION=WHITNEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00076049	0.15	0.310	<T 0.020	<T 0.010	0.065	0.200	D 0.012	0.001
00076057	0.21	0.340	0.030	<W 0.005	0.085	0.260	<T 0.006	0.001
00076062	0.22	0.610	0.040	<T 0.020	0.085	0.480	<T 0.007	0.003
00076070	0.23	0.470	0.050	0.080	0.115	0.380	0.015	0.005
00076082	0.08	0.530	0.045	0.030	0.030	0.434	<T 0.007	0.004
00076083	0.15	0.850	B 0.185	0.205	B 0.095	0.396	0.027	UG 0.011
00076088	0.09	0.490	0.050	0.045	0.030	0.442	<T 0.004	0.005
00076094	0.12	0.310	0.040	0.055	0.045	0.240	<T 0.002	<T 0.001
00076099	<W 0.01	0.310	0.031	<T 0.025	<T 0.020	0.300	0.016	<T 0.001
00076104	<W 0.04	0.370	0.035	<T 0.005	0.025	B 0.037	<W 0.002	<T 0.002
00076109	<W 0.01	0.240	<T 0.010	<T 0.015	<T 0.015	0.190	<T 0.002	0.001
00076113	0.26	0.260	0.020	0.025	0.072	0.216	<T 0.004	0.003
00076122	0.16	0.350	<T 0.020	<T 0.020	0.065	0.136	0.018	0.003

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00076049	< 0.0002	1DT 0.001	0.011	1DT 0.004	< 0.0004	1DT 0.011	1DT 0.0003	71.90
00076057	< 0.0002	< 0.002	0.029	0.003	< 0.0004	1DT 0.010	< 0.0003	80.00
00076062	< 0.0002	0.002	0.013	1DT 0.006	< 0.0004	1DT 0.017	< 0.0005	100.00
00076070	<W 0.0010	<T 0.010	<T 0.035	<W 0.002	<T 0.0004	<T 0.015	1DT 0.0004	92.40
00076082	<W 0.0010	<T 0.002	<T 0.025	1DT 0.003	<T 0.0004	<T 0.012	1DT 0.0002	64.70
00076083	<W 0.0010	<T 0.011	<T 0.104	1DT 0.022	< 0.0004	<T 0.043	<T 0.0014	LG 29.60
00076088	<W 0.0010	1DT 0.001	1DT 0.043	1DT 0.004	<T 0.0004	0.021	<T 0.0007	49.10
00076094	<W 0.0010	<T 0.004	<T 0.019	0.023	<T 0.0004	<T 0.007	1DT 0.0003	81.10
00076099	<W 0.0010	1DT 0.001	0.019	1DT 0.009	<T 0.0004	<T 0.007	<T 0.0004	LG 22.00
00076104	<W 0.0010	1DT 0.001	<T 0.050	<W 0.002	<T 0.0004	<T 0.008	1DT 0.0002	68.40
00076109	<T 0.0001	1DT 0.002	1DT 0.026	|BL ****	<T 0.0001	0.012	1DT 0.0003	77.00
00076113	<T 0.0002	UG 0.014	1DT 0.032	|BL ****	<T 0.0003	0.018	<T 0.0009	71.30
00076122	<T 0.0005	0.004	<T 0.144	0.002	<T 0.0002	0.027	<T 0.0007	57.10

PART V

NORTHWESTERN REGION
CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=DORION MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00031634	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	0902	0845	3			2	1.3	670.49
00031635	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0908	0906	2			2	37.8	30.80
00031636	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	0935	0911	2			2	38.7	49.10
00031637	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	0922	0942	2			2	46.8	80.95
00031638	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	0902	0934	1			2	37.5	88.46
00031639	AP02651	PR	02	01	JUN 14, 1988	MAY 17, 1988	0905	0907	1			3	19.0	104.72
00031640	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	1020	0910	1			3	62.0	89.92
00031641	AP02772	PR	02	01	AUG 9, 1988	JUL 12, 1988	0915	1020	1			3	98.0	94.29
00031642	AP02801	PR	02	01	SEP 6, 1988	AUG 9, 1988	0930	0918	1			3	162.0	93.83
00031643	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	0920	0932	1		1	3	98.0	91.17
00031644	AP03172	PR	02	01	NOV 1, 1988	OCT 4, 1988	0910	0922	3	1		2	84.2	85.41
00031645	AP03170	PR	02	01	NOV 29, 1988	NOV 1, 1988	0900	0913	3			2	185.8	65.76
00031646	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0945	0904	2			2	40.9	94.43

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE MG/L		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L
00031634	QP		283	11.50		4.53		****		0.55		0.37		0.12
00031635		N	378	14.00		4.58		****		0.85		0.46		0.14
00031636		N	617	13.50		4.70		****		1.60		0.31		0.26
00031637			1230	26.00		4.45		****		2.85		0.40		0.16
00031638	DBQ		1077	20.50	UG	4.99		****	UG	3.65		0.48		0.68
00031639	ACQ	HM	646	75.00	B	7.63	UG	****	B	6.25	UG	1.13	B	2.12
00031640			1810	10.50		5.16		****		1.45		0.42		0.24
00031641	ADQ	HM	3000	5.50		5.29		****	LG	0.20		0.10		0.18
00031642			4935	****		****		****		****		****		****
00031643			2901	13.00		4.71		****		1.45		0.25		0.16
00031644	ABIM	HM	764	7.30		6.49		****		1.55		0.38		0.34
00031645	G		3995	6.30		5.07		****		1.10		0.16		0.12
00031646	CFI	M	1245	12.50		4.38		****		1.30		0.28		0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=DORION MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00031634	0.19	0.190	<T 0.010	<W 0.005	0.145	<W 0.005	0.023	< 0.001
00031635	0.22	0.270	<T 0.025	<T 0.010	0.130	0.120	0.020	< 0.001
00031636	0.18	0.360	0.040	<T 0.020	0.130	0.260	<T 0.005	0.002
00031637	0.08	0.490	0.025	<T 0.010	0.065	0.430	<T 0.007	0.003
00031638	0.14	1.020	0.135	0.115	0.205	D 0.686	0.066	UG 0.017
00031639	0.07	U 9.500	B 0.380	U 1.060	0.110	U 6.950	U 0.875	0.011
00031640	0.08	0.620	0.050	0.070	0.045	0.494	0.012	0.004
00031641	<W 0.01	0.400	0.025	0.030	0.025	0.266	0.015	0.003
00031642	****	****	****	****	****	****	****	****
00031643	<T 0.04	0.280	<T 0.025	0.030	0.030	0.276	<W 0.002	0.003
00031644	0.11	0.580	0.050	0.040	0.035	0.416	0.017	0.003
00031645	0.15	UG 0.630	<T 0.010	0.065	0.085	0.228	0.010	0.002
00031646	0.14	0.190	<T 0.025	<T 0.015	0.075	0.114	<T 0.008	0.001

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00031634	< 0.0002	< 0.005	0.011	0.008	< 0.0004	1DT 0.026	D 0.0082	49.60
00031635	< 0.0002	< 0.004	0.015	0.012	< 0.0004	1DT 0.017	1DT 0.0022	59.10
00031636	< 0.0002	1DT 0.003	0.021	1DT 0.018	< 0.0004	1DT 0.010	< 0.0005	44.00
00031637	<W 0.0010	<T 0.007	<T 0.013	1DT 0.002	<T 0.0004	<T 0.009	1DT 0.0003	74.70
00031638	<W 0.0010	<T 0.009	<T 0.028	1DT 0.005	<T 0.0004	<T 0.028	1DT 0.0009	40.00
00031639	<W 0.0010	<T 0.015	0.076	1DT 0.030	<T 0.0004	<T 0.019	<T 0.0022	20.10
00031640	<W 0.0010	1DT 0.002	1DT 0.020	1DT 0.025	<T 0.0004	<T 0.008	1DT 0.0002	32.30
00031641	<W 0.0010	1DT 0.001	1DT 0.015	1DT 0.009	<T 0.0004	<T 0.009	1DT 0.0004	25.20
00031642	****	****	****	****	****	****	****	****
00031643	<W 0.0010	1DT 0.001	1DT 0.016	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	42.50
00031644	<T 0.0003	0.004	<T 0.049	0.003	<T 0.0002	0.073	<T 0.0011	19.00
00031645	<T 0.0004	UG 0.007	1DT 0.013	0.002	<T 0.0002	0.026	<T 0.0012	26.40
00031646	<T 0.0003	1DT 0.003	<W 0.007	0.001	<T 0.0003	0.010	1DT 0.0005	66.40

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-NW STATION=E.L.A. MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH (MM)	EFFICIENCY %
00013235	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	0955	1000	3			2	16.9	59.96
00013236	AP02512	PR	02	01	FEB 23, 1988	JAN 26, 1988	1045	0955	2			2	30.2	.
00013237	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1000	1045	2		1	2	14.2	140.77
00013238	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	1015	1000	3	1		2	37.5	68.83
00013239	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	1037	1015	1			3	11.0	124.04
00013240	AP02651	PR	02	01	JUN 14, 1988	MAY 17, 1988	1039	1037	1			3	26.0	80.55
00013241	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	0920	1039	1	1		3	215.0	82.37
00013242	AP02772	PR	02	01	AUG 9, 1988	JUL 12, 1988	0940	0920	1			3	38.0	112.83
00013243	AP02801	PR	02	01	SEP 7, 1988	AUG 9, 1988	0952	0940	1			3	37.0	87.32
00013244	AP02854	PR	02	01	OCT 3, 1988	SEP 7, 1988	0903	0952	2		1	3	51.0	77.30
00013245	AP03172	PR	02	01	NOV 1, 1988	OCT 3, 1988	1145	0903	3	1		3	35.8	49.73
00013246	AP03170	PR	02	01	NOV 29, 1988	NOV 1, 1988	1030	1145	3			2	39.6	9.10
00013247	AP02961	PR	02	01	DEC 31, 1988	NOV 29, 1988	1050	1130	3	1		2	33.0	30.99

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00013235		C	329	11.00		4.56	****		0.80		0.35	<T	0.10	
00013236	GE		****	****		****	****		****		****		****	
00013237		N	649	8.50	UG	5.55	****		0.95		0.28		0.22	
00013238		H	838	11.50	UG	5.59	****		1.95		0.31		0.22	
00013239	CQP		443	14.50	UG	6.99	****		2.45		0.47	UG	1.26	
00013240	AC		680	14.00	UG	6.78	****		1.90		0.46		0.58	
00013241	AQ	H	5750	6.00		5.74	****		1.00		0.27		0.14	
00013242	QBC	C	1392	8.00	UG	6.65	****		0.55		0.22		0.34	
00013243		M	1049	8.00	UG	6.83	****	D	1.50		0.29		0.46	
00013244		HZ	1280	12.50		5.28	****		2.15		0.39		0.66	
00013245		NH	576	5.65		6.24	****		1.05		0.38		0.18	
00013246	Q	N	108	!IS ****	!IS	****	****	!IS	****	!IS	****	<T	0.08	
00013247	GFJ	Z	330	18.00		4.47	****		1.30		0.57		0.14	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIDS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=E.L.A. MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00013235	0.13	0.200	<T 0.015	<W 0.005	0.160	0.080	D 0.043	< 0.001
00013236	****	****	****	****	****	****	****	****
00013237	0.09	0.460	0.040	<T 0.010	0.095	0.330	0.010	0.002
00013238	0.11	0.550	0.045	<T 0.015	D 0.465	0.280	0.010	0.004
00013239	0.16	0.860	UG 0.235	0.080	UG 0.255	0.306	0.046	0.005
00013240	<T 0.05	0.900	0.110	0.115	0.060	0.682	0.028	0.006
00013241	0.06	0.470	0.035	0.040	0.030	0.352	0.013	0.004
00013242	0.25	0.740	0.070	0.045	0.030	0.376	0.028	<T 0.002
00013243	<T 0.08	D 0.630	0.125	0.075	0.070	D 0.456	0.033	<T 0.001
00013244	0.06	0.730	0.075	0.080	0.040	0.490	D 0.026	UG 0.013
00013245	0.08	0.600	0.025	0.025	0.035	0.526	<T 0.006	0.003
00013246	!IS ****	UG 0.540	<T 0.010	<T 0.005	0.245	0.160	0.034	0.002
00013247	0.18	0.380	<T 0.020	<T 0.015	0.125	0.172	0.023	0.003

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00013235	0.0006	< 0.004	0.018	0.007	< 0.0004	1DT 0.031	1DT 0.0019	50.10
00013236	****	****	****	****	****	****	****	****
00013237	0.0002	< 0.003	0.021	1DT 0.007	< 0.0004	< 0.013	1DT 0.0017	24.90
00013238	<W 0.0010	<T 0.003	1DT 0.020	<W 0.002	<T 0.0005	<T 0.011	1DT 0.0007	21.00
00013239	<W 0.0010	1DT 0.003	<T 0.090	1DT 0.019	<T 0.0004	<T 0.030	1DT 0.0006	16.60
00013240	<W 0.0010	1DT 0.002	1DT 0.025	1DT 0.009	<T 0.0004	<T 0.012	1DT 0.0005	19.30
00013241	<W 0.0010	<T 0.009	<T 0.013	1DT 0.007	<T 0.0004	<T 0.006	1DT 0.0001	26.70
00013242	<W 0.0010	1DT 0.001	<T 0.024	<T 0.028	<T 0.0004	<T 0.009	1DT 0.0002	20.00
00013243	<W 0.0010	1DT 0.002	<T 0.037	1DT 0.026	<T 0.0004	<T 0.010	1DT 0.0013	18.80
00013244	<W 0.0010	1DT 0.001	<T 0.048	<W 0.002	<T 0.0004	<T 0.013	1DT 0.0003	31.10
00013245	<T 0.0003	0.004	<W 0.011	0.003	<T 0.0001	0.036	1DT 0.0006	36.80
00013246	<W 0.0001	1DT 0.003	<T 0.317	UG 3.508	<T 0.0001	0.105	UG 0.1779	!IS ****
00013247	<T 0.0007	0.005	1DT 0.019	UG 0.013	<T 0.0002	0.049	<T 0.0019	60.40

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=EAR FALLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00013628	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	0900	0900	2			2	19.9	81.41
00013629	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1115	0900	2			2	26.8	78.26
00013630	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1000	1115	2			2	46.3	39.58
00013631	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	0900	1000	2			2	29.8	63.36
00013634	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	0900	0900	1			3	2.1	962.13
00013635	AP02651	PR	02	01	JUN 14, 1988	MAY 17, 1988	0900	0900	1			3	35.0	66.62
00013636	AP02715	PR	02	01	JUL 13, 1988	JUN 14, 1988	1500	0900	1			3	140.0	94.14
00013637	AP02772	PR	02	01	AUG 9, 1988	JUL 13, 1988	0900	1500	1			3	73.0	53.04
00013638	AP02801	PR	02	01	SEP 6, 1988	AUG 9, 1988	1500	0900	1			3	72.0	54.24
00013639	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	0900	1500	1			3	110.0	46.06
00013640	AP03172	PR	02	01	NOV 1, 1988	OCT 4, 1988	0900	0900	3			3	39.1	74.12
00013641	AP03170	PR	02	01	NOV 29, 1988	NOV 1, 1988	1330	0900	2		1	2	49.6	49.49
00013642	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0900	1330	2	1		2	13.2	153.53

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE MG/L		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00013628			526	7.50		4.96	****		0.60		0.26		0.12	
00013629		HM	681	7.50		5.00	****		0.75		0.23		0.10	
00013630		NHC	595	8.00	UG	5.74	****		0.80		0.27		0.14	
00013631		H	613	9.00		5.38	****		1.25		0.24		0.26	
00013634	QAP		656	9.50		6.23	****		1.50		0.28		0.60	
00013635	QC	HM	757	15.00	UG	7.31	****		1.85		0.54		0.78	
00013636	QC		4279	7.00		6.40	****		1.15		0.19		0.26	
00013637	GAQ	HCM	1257	5.50		6.37	****	<W	0.05	LG	0.08		0.18	
00013638	CG	HM	1268	4.50		6.28	****		0.90		0.11		0.28	
00013639	G		1645	11.00		4.94	****		1.50		0.18		0.20	
00013640	C	HM	945	4.70		5.57	****		0.70		0.23		0.10	
00013641	C	N	706	3.80		5.41	****		0.45		0.21		0.22	
00013642		N	654	9.50		4.70	****		0.85		0.30	<T	0.10	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=EAR FALLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00013628	0.18	0.190	<T 0.020	<T 0.015	0.140	0.070	<T 0.009	< 0.001
00013629	0.13	0.270	<T 0.020	<T 0.010	0.090	0.110	0.013	0.001
00013630	0.10	0.390	D 0.025	<T 0.005	0.065	0.320	<T 0.002	0.002
00013631	0.13	0.360	0.045	<T 0.010	0.160	0.210	<T 0.008	0.004
00013634	0.12	0.390	0.095	0.050	0.145	0.192	0.013	0.004
00013635	<T 0.03	1.100	0.155	0.180	0.090	0.590	0.045	0.006
00013636	0.12	0.450	0.060	0.080	0.165	0.298	0.018	<T 0.001
00013637	0.07	0.610	0.035	0.100	D 0.095	0.326	0.023	<T 0.001
00013638	0.10	0.350	0.100	0.055	0.120	0.256	0.026	<T 0.001
00013639	<T 0.04	0.370	0.025	0.030	0.025	0.326	<T 0.004	0.004
00013640	0.12	0.250	<T 0.020	<T 0.020	0.055	0.164	0.011	0.002
00013641	0.12	0.200	<T 0.025	0.055	0.075	0.088	0.030	UG 0.009
00013642	0.17	0.190	<T 0.015	<T 0.010	0.115	0.074	0.014	0.002

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00013628	D 0.0016	1DT 0.007	0.018	1DT 0.006	< 0.0004	1DT 0.018	1DT 0.0012	35.70
00013629	0.0002	< 0.002	0.012	0.009	< 0.0004	1DT 0.014	0.0018	39.00
00013630	0.0002	< 0.003	0.010	1DT 0.014	< 0.0004	1DT 0.009	< 0.0005	21.30
00013631	<W 0.0010	<T 0.004	1DT 0.010	<W 0.003	<T 0.0004	<T 0.013	1DT 0.0004	21.80
00013634	<W 0.0010	1DT 0.002	<T 0.043	1DT 0.013	<T 0.0004	<T 0.014	1DT 0.0004	16.50
00013635	<W 0.0010	1DT 0.004	<T 0.103	1DT 0.010	<T 0.0004	<T 0.031	1DT 0.0005	16.30
00013636	<W 0.0010	<T 0.007	<T 0.050	0.035	<T 0.0004	<T 0.021	1DT 0.0002	25.40
00013637	<W 0.0010	<T 0.006	<T 0.037	1DT 0.023	<T 0.0004	<T 0.009	1DT 0.0007	20.20
00013638	<W 0.0010	1DT 0.002	<T 0.020	1DT 0.018	<T 0.0004	<T 0.009	1DT 0.0003	19.10
00013639	<W 0.0010	<T 0.005	1DT 0.010	<W 0.002	<T 0.0004	<T 0.008	<T 0.0004	35.80
00013640	<T 0.0003	1DT 0.003	<W 0.008	0.001	<T 0.0001	0.030	<T 0.0010	19.60
00013641	<T 0.0002	1DT 0.003	<T 0.040	0.001	<T 0.0001	0.031	<T 0.0013	23.30
00013642	<T 0.0007	1DT 0.003	<W 0.010	UG 0.004	<T 0.0001	0.024	<T 0.0012	39.60

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=GERALDTON MIC TYPE A SITE NO. 1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH (MM)	EFFICIENCY %
00013387	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	1555	1650	2			2	26.8	41.03
00013389	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1715	1555	2			2	30.6	36.94
00013391	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1655	1715	2			2	50.3	48.13
00013393	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	1400	1655	2			2	51.3	53.67
00013395	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	1445	1400	1			2	35.3	105.49
00013397	AP02651	PR	02	01	JUN 14, 1988	MAY 17, 1988	1515	1445	1			3	40.0	94.09
00013399	AP02715	PR	02	01	JUL 13, 1988	JUN 14, 1988	1200	1515	1		1	3	166.0	65.40
00013401	AP02772	PR	02	01	AUG 9, 1988	JUL 13, 1988	1435	1200	1	1		3	111.0	84.74
00013403	AP02801	PR	02	01	SEP 6, 1988	AUG 9, 1988	1440	1435	1			3	93.0	87.47
00013405	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1136	1440	1		1	3	110.0	88.73
00013407	AP03172	PR	02	01	OCT 31, 1988	OCT 4, 1988	1600	1440	3			2	83.4	50.34
00013409	AP03170	PR	02	01	NOV 29, 1988	OCT 31, 1988	1110	1600	2			2	81.5	16.10
00013411	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	1000	1110	2			2	33.6	20.17

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00013387		N	357	17.50	4.35	****	1.05	0.45	<T 0.08
00013389		N	367	9.50	4.80	****	0.80	0.29	0.20
00013391		N	786	20.50	4.61	****	2.05	0.54	0.38
00013393			894	14.50	4.71	****	1.65	0.20	0.28
00013395	CQ	H	1209	8.00	5.03	****	1.35	0.19	0.36
00013397	Q		1222	18.00	UG 6.79	****	2.55	0.51	0.48
00013399	GQ	H	3525	6.50	5.41	****	1.15	0.22	0.18
00013401	AC	HCM	3054	5.00	5.31	****	<W 0.05	<W 0.01	0.14
00013403	AC	HCM	2641	4.00	5.26	****	0.70	0.13	0.12
00013405			3169	8.50	4.92	****	1.00	0.16	0.12
00013407	M	HM	1469	7.70	5.00	****	1.30	0.24	0.10
00013409	Q	NHM	424	6.90	5.09	****	0.90	0.27	<T 0.08
00013411	G	C	216	9.00	4.48	****	0.75	0.24	<T 0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=GERALDTON MIC TYPE A SITE NO. 1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00013387	0.15	0.220	<T 0.010	<W 0.005	0.090	0.080	<T 0.009	< 0.001
00013389	0.17	0.300	D 0.050	<T 0.015	0.100	0.120	0.022	< 0.001
00013391	0.13	0.480	0.045	<T 0.025	0.160	0.350	<T 0.003	0.004
00013393	0.07	0.190	0.035	<W 0.005	0.065	0.120	<T 0.007	<T 0.002
00013395	0.08	0.230	0.060	0.030	0.080	0.154	<T 0.008	0.008
00013397	0.18	UG 1.820	0.095	UG 0.340	0.060	UG 1.140	0.130	UG 0.012
00013399	<T 0.04	0.350	0.040	0.030	0.040	0.254	<T 0.009	0.005
00013401	<W 0.01	0.330	<T 0.020	0.030	<T 0.010	0.226	0.019	<T 0.002
00013403	<W 0.01	0.250	0.025	0.030	0.035	0.226	0.021	<T 0.002
00013405	<T 0.02	0.170	<T 0.020	<T 0.020	0.030	0.156	0.010	0.003
00013407	0.10	0.260	<T 0.015	<T 0.015	0.040	0.180	<T 0.008	0.001
00013409	0.13	0.260	<T 0.015	<T 0.015	0.050	0.136	0.010	0.002
00013411	0.19	!IS ****	<T 0.005	<W 0.005	0.140	<W 0.002	!IS ****	0.001

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00013387	< 0.0002	< 0.004	0.015	1DT 0.009	0.0004	1DT 0.019	1DT 0.0029	62.70
00013389	0.0002	< 0.004	0.014	0.004	< 0.0004	1DT 0.015	< 0.0007	47.60
00013391	0.0002	1DT 0.003	0.048	1DT 0.004	< 0.0004	0.024	< 0.0005	48.30
00013393	<W 0.0010	1DT 0.002	1DT 0.016	<T 0.014	0.0012	<T 0.011	1DT 0.0004	40.90
00013395	<W 0.0010	1DT 0.001	<T 0.035	1DT 0.009	<T 0.0004	<T 0.015	1DT 0.0003	28.10
00013397	<W 0.0010	<T 0.009	<T 0.035	1DT 0.012	<T 0.0004	<T 0.013	1DT 0.0008	22.10
00013399	<W 0.0010	1DT 0.002	1DT 0.032	1DT 0.006	<T 0.0004	<T 0.014	1DT 0.0003	27.80
00013401	<W 0.0010	1DT 0.001	1DT 0.008	1DT 0.015	<T 0.0004	<T 0.007	1DT 0.0002	23.90
00013403	<W 0.0010	1DT 0.002	1DT 0.007	1DT 0.005	<T 0.0004	<T 0.007	1DT 0.0003	25.80
00013405	<W 0.0010	1DT 0.001	1DT 0.019	<W 0.001	<T 0.0004	<T 0.009	<T 0.0009	34.40
00013407	<T 0.0003	1DT 0.003	<W 0.007	0.001	<T 0.0001	0.018	1DT 0.0009	23.50
00013409	<T 0.0004	1DT 0.002	<T 0.090	0.002	<T 0.0002	0.075	<T 0.0012	27.60
00013411	<T 0.0006	1DT 0.003	1DT 0.016	1DT 0.001	<T 0.0001	0.040	<T 0.0011	58.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=LAC LA CROIX MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00095113	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	0800	0800	2			2	3.8	345.28
00095114	AP02558	PR	02	01	FEB 29, 1988	JAN 26, 1988	0800	0800	2			2	36.9	35.89
00095115	AP02558	PR	02	01	MAR 22, 1988	FEB 29, 1988	1000	0800	2			2	111.5	45.72
00095116	AP02631	PR	02	01	APR 19, 1988	MAR 22, 1988	0800	1000	3			2	43.0	2.15
00095117	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	0800	0800	3			2	45.5	74.73
00095118	AP02651	PR	02	01	JUN 14, 1988	MAY 17, 1988	0800	0800	1			3	70.0	80.83
00095119	AP02715	PR	02	01	JUL 12, 1988	JUN 14, 1988	0800	0800	1			3	75.0	81.68
00095120	AP02801	PR	02	01	AUG 9, 1988	JUL 12, 1988	0800	0800	1			3	195.0	101.99
00095121	AP02854	PR	02	01	SEP 6, 1988	AUG 9, 1988	0800	0800	1			3	210.0	79.20
00095122	AP02854	PR	02	01	OCT 13, 1988	SEP 6, 1988	0600	0800	1			3	90.0	85.62
00095123	AP03172	PR	02	01	NOV 1, 1988	OCT 13, 1988	0800	1600	3			2	29.7	80.27
00095124	AP02961	PR	02	01	DEC 12, 1988	NOV 1, 1988	0800	0800	3			2	64.1	64.34
00095125	AP03018	PR	02	01	DEC 26, 1988	DEC 12, 1988	0800	0800	3			2	5.7	268.01

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00095113		N	426	10.00	4.66	****	0.60	0.33	0.10
00095114		NZ	430	17.50	4.63	****	1.20	0.44	0.30
00095115		NHCM2	1655	15.00 UG	5.55	****	1.85	0.42	0.46
00095116	P		30	!IS ****	!IS ****	****	!IS ****	!IS ****	!IS ****
00095117	A	HC	1104	7.00	5.88	****	1.00	0.18	0.20
00095118	QC		1837	13.00	5.13	****	2.25	0.44	0.48
00095119	CQ		1989	8.00	5.66	****	0.85	0.29	0.14
00095120	A	HCM	6457	6.00	5.09	****	0.70	0.23	0.14
00095121	AC		5400	5.00	5.49	****	1.00	0.16	0.16
00095122	F	Z	2502	6.00	5.09	****	1.00	0.17	0.14
00095123	Q	HZ	748	7.00	5.68	****	1.25	0.40	0.34
00095124	Q	Z	1338	10.50	4.70	****	1.00	0.32	0.14
00095125	Q	NZ	493	16.00	4.49	****	0.90	0.55	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=LAC LA CROIX MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00095113	0.07	0.140	<T 0.015	<W 0.005	0.050	0.040	<T 0.005	D 0.002
00095114	0.26	0.200	0.050	<T 0.020	0.190	0.020	0.019	0.007
00095115	0.30	0.570	0.050	0.065	0.250	0.290	0.041	B 0.011
00095116	!IS ****	!IS ****	!IS ****	!IS ****	!IS ****	0.750	!IS ****	****
00095117	0.07	0.430	0.045	0.065	0.080	0.192	0.016	0.005
00095118	0.08	0.700	0.070	0.075	0.025	0.526	0.012	0.010
00095119	0.05	0.460	<T 0.020	0.025	<T 0.020	0.398	<T 0.003	0.003
00095120	D 0.83	0.780	0.030	0.190	<T 0.020	D 0.706	D 0.054	<T 0.002
00095121	<T 0.05	0.260	0.030	0.030	0.040	0.236	<T 0.004	0.004
00095122	<T 0.03	0.240	<T 0.020	<T 0.020	<T 0.015	0.246	<T 0.003	<T 0.002
00095123	0.12	0.610	0.045	0.045	0.075	0.358	0.019	0.005
00095124	0.09	0.200	<T 0.015	<T 0.015	0.045	0.118	<T 0.006	UG 0.004
00095125	0.10	0.230	<T 0.015	<T 0.010	0.075	0.150	0.014	0.002

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00095113	< 0.0002	< 0.003	0.026	1DT 0.008	< 0.0004	1DT 0.014	1DT 0.0029	43.20
00095114	<W 0.0010	<T 0.013	0.054	<T 0.013	<T 0.0004	0.026	1DT 0.0013	48.40
00095115	<W 0.0010	<T 0.007	<T 0.012	<T 0.005	<T 0.0004	<T 0.010	1DT 0.0002	24.60
00095116	****	****	****	****	****	****	****	!IS ****
00095117	<W 0.0010	<T 0.003	<T 0.021	1DT 0.008	< 0.0004	<T 0.010	1DT 0.0003	20.40
00095118	<W 0.0010	<T 0.008	<T 0.045	1DT 0.011	<T 0.0004	<T 0.016	<T 0.0024	29.50
00095119	<W 0.0010	<T 0.004	1DT 0.018	1DT 0.020	<W 0.0001	<T 0.008	1DT 0.0002	23.40
00095120	<W 0.0010	1DT 0.001	<T 0.008	<T 0.006	<T 0.0004	<T 0.006	1DT 0.0002	28.30
00095121	<W 0.0010	1DT 0.001	1DT 0.022	<W 0.001	<T 0.0004	<T 0.009	1DT 0.0002	23.30
00095122	<W 0.0010	1DT 0.001	1DT 0.008	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	27.10
00095123	<T 0.0005	1DT 0.004	1DT 0.023	0.002	<T 0.0002	0.051	1DT 0.0006	19.90
00095124	<W 0.0001	0.002	<T 0.015	1DT 0.001	<T 0.0001	0.012	<T 0.0005	40.20
00095125	<T 0.0004	0.003	1DT 0.012	0.002	<T 0.0001	0.025	1DT 0.0007	59.70

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION-NW STATION=PICKLE LAKE M1C TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00013868	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	1230	1045	2			2	13.4	143.89
00013869	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1200	1230	2			2	28.7	45.72
00013870	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	1130	1200	2		1	2	17.3	68.54
00013871	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	1230	1130	2	1		2	33.8	67.80
00013872	AP02631	PR	02	01	MAY 17, 1988	APR 19, 1988	1230	1230	1			3	1.2	847.00
00013873	AP02651	PR	02	01	JUN 21, 1988	MAY 17, 1988	1130	1230	1			3	119.0	68.64
00013874	AP02715	PR	02	01	JUL 12, 1988	JUN 21, 1988	1130	1130	1			3	130.0	49.80
00013875	AP02772	PR	02	01	AUG 10, 1988	JUL 12, 1988	0930	1130	1			3	14.0	313.72
00013876	AP02801	PR	02	01	SEP 8, 1988	AUG 10, 1988	1405	0940	1			3	81.0	75.25
00013877	AP02854	PR	02	01	OCT 4, 1988	SEP 8, 1988	1130	1405	3		1	3	86.0	89.96
00013878	AP03172	PR	02	01	NOV 2, 1988	OCT 4, 1988	1230	1130	3	1	1	2	25.3	124.17
00013879	AP03170	PR	02	01	NOV 29, 1988	NOV 2, 1988	1530	1230	3	1	1	2	31.9	129.28
00013880	AP02961	PR	02	01	DEC 27, 1988	NOV 29, 1988	1420	1530	2	1	1	2	39.4	50.11

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00013868		NM	626	6.00	4.87	****	0.45 LG	0.17 <T	0.02
00013869		NM	426	LG 5.00	5.08	**** D	0.50 LG	0.15 <T	0.06
00013870		HM	385	8.00 B	7.14	****	1.20	0.20	0.54
00013871	Q	X	744	****	****	****	****	****	****
00013872	AP		330	UG 20.50	4.87	**** UG	3.30	0.47 UG	1.06
00013873	BJCQ	Z	2652	12.00	6.53	****	1.75	0.29	0.38
00013874	ABCF	Z	2102	7.00	5.73	****	1.00	0.28	0.28
00013875	ACF	HCM	1426	6.00	6.43	**** LG	0.20	0.11	0.28
00013876	QF	HCM	1979	4.00	4.25	****	0.65	0.11	0.22
00013877	GB	Z	2512	6.00	5.07	****	0.70	0.09 <T	0.08
00013878	BCFJ		1011	5.00	5.27	****	0.80	0.16	0.14
00013879	C	N	1346	LG 2.30 UG	5.66	****	0.40 LG	0.10	0.16
00013880	FJ		632	4.00	4.99	****	0.50	0.15	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=PICKLE LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00013868	0.07	<T 0.080	<T 0.005	<W 0.005	0.055	<T 0.010	<T 0.009	< 0.001
00013869	0.14	0.160	<T 0.010	<T 0.005	0.100	D 0.050	0.018	< 0.001
00013870	0.15	0.230	D 0.150	<T 0.015	0.335	D 0.050	0.025	****
00013871	****	****	****	****	****	****	****	****
00013872	D 0.33	0.680	0.165	0.085	UG 0.240	0.214	0.027	UG 0.012
00013873	<T 0.02	0.900	0.090	UG 0.425	0.040	0.558	0.095	0.008
00013874	0.07	0.540	0.070	0.060	0.030	0.294	D 0.036	0.004
00013875	0.16	0.500	0.055	0.080	0.040	0.290	0.028	D 0.006
00013876	<T 0.02	0.290	0.050	0.040	0.045	0.210	0.026	0.003
00013877	<T 0.03	0.120	<T 0.015	<T 0.015	<T 0.010	0.120	<T 0.002	<T 0.001
00013878	0.09	0.350	0.030	0.065	0.110	0.134	0.025	0.003
00013879	0.19	0.160	0.025	0.075	0.155	LG 0.020	0.013	0.002
00013880	0.12	<T 0.070	0.030	<T 0.005	0.075	<W 0.002	0.010	0.001

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00013868	< 0.0002	< 0.003	0.006	0.004	< 0.0004	1DT 0.011	1DT 0.0015	33.10
00013869	< 0.0002	< 0.003	0.013	0.009	< 0.0004	1DT 0.014	< 0.0007	33.80
00013870	****	****	****	****	****	****	****	LG 16.20
00013871	****	****	****	****	****	****	****	****
00013872	<W 0.0010	<T 0.012	<T 0.083	1DT 0.031	<T 0.0004	<T 0.023	<T 0.0020	39.00
00013873	<W 0.0010	1DT 0.011	<T 0.034	1DT 0.008	<T 0.0004	<T 0.012	1DT 0.0011	24.40
00013874	<W 0.0010	<T 0.006	1DT 0.019	1DT 0.015	<T 0.0004	<T 0.008	1DT 0.0005	36.70
00013875	<W 0.0010	<T 0.004	<T 0.036	1DT 0.017	<T 0.0004	<T 0.011	1DT 0.0021	16.00
00013876	<W 0.0010	<T 0.008	1DT 0.019	0.026	<T 0.0004	<T 0.008	1DT 0.0006	UG 83.10
00013877	<W 0.0010	1DT 0.001	1DT 0.004	<W 0.001	<T 0.0004	<T 0.007	1DT 0.0002	30.50
00013878	<T 0.0004	0.004	<T 0.023	0.001	<T 0.0001	0.043	<T 0.0008	22.50
00013879	<T 0.0007	UG 0.012	<T 0.043	0.001	<T 0.0001	0.027	0.0022	19.80
00013880	<T 0.0007	1DT 0.002	1DT 0.010	1DT 0.001	<T 0.0001	0.016	<T 0.0011	28.40

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=QUETICO CENTRE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH (MM)	EFFICIENCY %
00095315	AP02475	PR	02	01	JAN 26, 1988	DEC 29, 1987	1400	0900	2			2	15.9	57.53
00095316	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0900	1400	2			2	15.1	78.73
00095317	AP02540	PR	02	01	MAR 22, 1988	FEB 23, 1988	0900	0900	2			2	52.1	9.75
00095318	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	0900	0900	3			2	44.1	58.18
00095319	AP02631	PR	02	01	MAY 26, 1988	APR 19, 1988	0900	0900	1			3	76.7	63.37
00095320	AP02651	PR	02	01	JUN 14, 1988	MAY 26, 1988	0900	0900	1			3	44.0	90.02
00095321	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	0900	0900	1			3	61.0	88.71
00095322	AP02772	PR	02	01	AUG 9, 1988	JUL 12, 1988	0900	0900	1			3	155.0	89.30
00095323	AP02801	PR	02	01	SEP 6, 1988	AUG 9, 1988	0900	0900	1			3	210.0	96.80
00095324	AP02854	PR	02	01	OCT 4, 1988	SEP 6, 1988	1100	0900	1			2	64.6	50.54
00095325	AP03172	PR	02	01	NOV 1, 1988	OCT 4, 1988	0900	1100	3			2	57.5	83.40
00095326	AP03170	PR	02	01	NOV 29, 1988	NOV 1, 1988	0900	0900	3			2	77.9	73.26
00095327	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0900	0900	2			2	22.0	69.58

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00095315			297	14.50	4.46	****	0.65	0.43	0.10
00095316		HM	386	10.50	4.85	****	0.80	0.32	0.12
00095317		NH	165	12.50	5.29	****	1.40	0.45	0.26
00095318			833	26.50	4.61	****	3.20	0.72	B 0.72
00095319	Q	HZ	1578	11.00	4.99	****	1.25	0.27	0.26
00095320		Z	1286	15.50	4.81	****	2.05	0.40	0.42
00095321	CQ		1757	11.00	5.14	****	1.30	0.29	0.20
00095322	A	HCM	4494	4.00	5.55	****	<W 0.05	<T 0.02	0.14
00095323	GP	HCM	6600	LG 3.00	4.49	****	0.55	0.10	<T 0.06
00095324	PB	H	1060	12.00	5.65	****	2.60	0.46	0.74
00095325	B		1555	5.70	5.23	****	0.85	0.21	0.20
00095326	G		1855	9.40	4.69	****	0.70	0.27	<T 0.06
00095327	P		415	15.00	4.53	****	0.80	0.45	<T 0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=NW STATION=QUETICO CENTRE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00095315	0.15	0.200	<T 0.015	<W 0.005	0.100	0.040	0.015	0.001
00095316	0.10	0.230	<T 0.015	<W 0.005	0.060	0.130	0.011	0.001
00095317	0.28	0.640	0.045	0.050	0.310	0.380	0.017	0.005
00095318	0.15	0.860	0.065	0.055	0.130	0.650	D 0.025	B 0.014
00095319	0.10	0.280	0.050	0.035	0.100	0.118	0.015	0.005
00095320	0.12	0.590	0.050	0.080	0.050	0.452	0.010	0.007
00095321	0.12	0.510	0.040	0.095	0.115	0.340	0.012	0.005
00095322	<W 0.01	0.260	<T 0.015	<T 0.020	<T 0.010	0.226	<T 0.007	0.003
00095323	0.12	0.210	<T 0.010	D 0.139	<T 0.020	0.206	0.018	<T 0.001
00095324	0.09	0.590	0.125	0.095	D 0.100	0.530	<T 0.006	0.010
00095325	0.08	0.330	<T 0.020	<T 0.020	0.055	0.222	<T 0.008	0.003
00095326	0.09	0.120	<T 0.005	<T 0.010	0.030	0.078	<T 0.006	0.001
00095327	0.13	0.150	<T 0.010	<T 0.010	0.100	LG 0.022	0.014	0.002

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00095315	< 0.0002	< 0.004	0.022	1DT 0.007	< 0.0004	1DT 0.039	1DT 0.0010	57.40
00095316	< 0.0002	< 0.004	0.015	0.006	< 0.0004	1DT 0.018	1DT 0.0019	45.60
00095317	0.0002	1DT 0.020	0.036	< 0.007	< 0.0004	1DT 0.043	< 0.0014	29.00
00095318	<W 0.0010	0.012	D 0.045	<T 0.012	<T 0.0004	<T 0.023	1DT 0.0005	55.80
00095319	<W 0.0010	1DT 0.004	<T 0.024	1DT 0.009	< 0.0004	<T 0.013	1DT 0.0003	34.50
00095320	<W 0.0010	1DT 0.003	<T 0.049	1DT 0.008	<T 0.0004	<T 0.016	1DT 0.0013	39.20
00095321	<W 0.0010	1DT 0.001	<T 0.027	1DT 0.011	<T 0.0004	<T 0.013	1DT 0.0003	24.20
00095322	<W 0.0010	1DT 0.001	1DT 0.001	1DT 0.008	<T 0.0004	<T 0.009	1DT 0.0004	20.50
00095323	<W 0.0010	1DT 0.001	1DT 0.008	1DT 0.004	<T 0.0004	<T 0.007	1DT 0.0002	UG 57.00
00095324	<W 0.0010	1DT 0.001	<T 0.051	<W 0.002	<T 0.0004	<T 0.011	1DT 0.0003	22.90
00095325	<T 0.0004	1DT 0.003	1DT 0.010	0.001	<T 0.0001	0.028	1DT 0.0004	29.50
00095326	<T 0.0001	1DT 0.001	1DT 0.021	0.001	<T 0.0001	0.017	<T 0.0006	39.60
00095327	<T 0.0001	0.002	1DT 0.014	1DT 0.000	<T 0.0001	0.025	<T 0.0008	55.40

PART VI

SOUTHEASTERN REGION

CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=CLOYNE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00094450	AP02548	PR	02	01	JAN 26, 1988	DEC 29, 1987	1600	1800	3			2	52.0	63.26
00094452	AP02548	PR	02	01	FEB 23, 1988	JAN 26, 1988	1730	1600	3			2	87.0	92.29
00094451	AP02548	PR	02	01	MAR 23, 1988	FEB 23, 1988	1730	1730	3			2	16.0	55.63
00068208	AP02639	PR	02	01	APR 19, 1988	MAR 23, 1988	0740	1730	3			3	84.0	80.04
00068209	AP02780	PR	02	01	MAY 17, 1988	APR 19, 1988	0720	0740	1		1	3	55.0	.
00068210	AP02780	PR	02	01	JUN 14, 1988	MAY 17, 1988	0725	0720	1	1		3	27.0	93.65
00068211	AP02780	PR	02	01	JUL 12, 1988	JUN 14, 1988	0720	0725	1			3	32.0	87.20
00068212	AP02780	PR	02	01	AUG 9, 1988	JUL 12, 1988	0835	0720	1			3	69.0	32.85
00068213	AP02898	PR	02	01	SEP 6, 1988	AUG 9, 1988	1700	0835	1			3	105.0	77.70
00068214	AP02898	PR	02	01	OCT 4, 1988	SEP 6, 1988	0700	1700	1	1		3	71.0	89.80
00068215	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	0700	0700	1			3	109.0	89.07
00068216	AP02961	PR	02	01	NOV 29, 1988	NOV 1, 1988	1600	0700	3			3	57.0	98.18
00068217	AP03080	PR	02	01	DEC 28, 1988	NOV 29, 1988	0930	1600	3			2	33.0	156.61

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE	SULFATE MG/L		NITRATE MG/L	CALCIUM MG/L
00094450			1068	D 44.50		4.29	****	3.20		1.12	0.70
00094452			2607	31.00		4.38	****	2.10		0.65	0.36
00094451			289	UG 66.00		4.13	****	6.20	UG	1.95	1.68
00068208			2183	38.50		4.25	****	3.70		0.76	0.28
00068209	GE		****	****		****	****	****		****	****
00068210	AD	HCM	821	LG 6.00		4.69	****	LG 0.85	<W	0.01	0.14
00068211	Q	H	906	21.00		4.42	****	2.40		0.30	0.20
00068212	CD	NH	736	25.00		4.36	****	3.25		0.36	0.24
00068213	CDA	H	2639	35.00		4.28	****	3.75		0.51	0.80
00068214	D		2034	33.00		4.25	****	3.05		0.48	0.26
00068215	GB	H	3088	13.00	UG	5.37	****	2.10		0.38	0.96
00068216	C		1801	27.00		4.15	****	2.50		0.56	0.14
00068217	P		1670	20.50		4.32	****	1.85		0.53	0.26

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=CLOYNE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00094450	0.52	0.630	0.075	0.030	0.270	0.430	0.011	0.004
00094452	0.34	0.360	0.045	<T 0.020	0.210	0.270	<T 0.004	0.003
00094451	UG 1.59	1.370	0.190	0.085	1.190	1.050	0.012	0.016
00068208	0.24	0.640	0.055	0.035	0.120	0.560	<T 0.003	0.005
00068209	****	****	****	****	****	****	****	****
00068210	<T 0.05	0.300	<T 0.015	0.060	0.065	<W 0.006	D 0.126	<T 0.001
00068211	<T 0.03	0.480	0.055	0.045	<T 0.025	0.380	0.011	0.003
00068212	<T 0.02	0.700	0.035	0.045	<T 0.015	0.626	0.010	0.003
00068213	0.15	1.280	0.060	0.195	0.110	0.370	0.117	0.005
00068214	0.15	0.640	0.050	0.030	0.065	0.356	0.030	0.004
00068215	UG 0.27	0.530	0.150	0.285	0.165	0.120	<T 0.003	0.015
00068216	0.21	0.330	0.030	0.030	0.085	0.264	<W 0.002	0.002
00068217	0.22	0.230	0.030	0.030	0.085	0.202	<T 0.003	0.003

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00094450	0.0003	1DT 0.013	0.052	1DT 0.002	< 0.0004	1DT 0.022	< 0.0004	92.90
00094452	0.0004	1DT 0.004	0.023	1DT 0.002	< 0.0004	0.010	< 0.0003	68.70
00094451	0.0008	1DT 0.023	UG 0.160	1DT 0.007	0.0005	UG 0.071	< 0.0009	132.00
00068208	<W 0.0010	<T 0.007	<T 0.020	1DT 0.011	<T 0.0004	<T 0.009	<T 0.0006	93.30
00068209	****	****	****	****	****	****	****	****
00068210	UG 0.0620	<T 0.011	0.026	1DT 0.053	<T 0.0004	0.018	UG 0.0055	38.40
00068211	<W 0.0010	<T 0.005	<T 0.024	1DT 0.015	<T 0.0004	<T 0.011	1DT 0.0003	57.50
00068212	<W 0.0010	<T 0.004	<T 0.024	1DT 0.030	<T 0.0004	<T 0.012	1DT 0.0004	69.40
00068213	<T 0.0003	0.008	1DT 0.011	|BL ****	<T 0.0000	0.009	1DT 0.0021	84.80
00068214	<T 0.0003	0.005	<T 0.011	|BL ****	<T 0.0001	0.030	<T 0.0007	84.00
00068215	<T 0.0004	0.008	<W 0.005	|BL ****	<T 0.0003	0.012	<T 0.0014	LG 24.30
00068216	<T 0.0006	0.005	<W 0.006	0.002	UG 0.0005	0.023	<T 0.0010	102.00
00068217	<T 0.0005	L 0.006	L 0.034	0.003	UG 0.0005	0.048	L 0.0009	75.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=DALHOUSIE MILLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00094440	AP02548	PR	02	01	JAN 26, 1988	DEC 29, 1987	0800	0800	2		2	2	27.0	58.18
00094441	AP02548	PR	02	01	FEB 23, 1988	JAN 26, 1988	0800	0800	2			2	73.0	52.61
00094442	AP02548	PR	02	01	MAR 22, 1988	FEB 23, 1988	0800	0800	3			2	16.0	72.57
00094455	AP02558	PR	02	01	APR 19, 1988	MAR 22, 1988	0800	0800	1			2	45.0	57.77
00094540	AP02639	PR	02	01	MAY 17, 1988	APR 19, 1988	0800	0800	1			3	47.0	93.58
00094568	AP02780	PR	02	01	JUN 14, 1988	MAY 17, 1988	1730	0800	1			3	38.0	.
00094569	AP02780	PR	02	01	JUL 12, 1988	JUN 14, 1988	0800	1730	1			3	10.5	.
00094570	AP02780	PR	02	01	AUG 9, 1988	JUL 12, 1988	0900	0800	1			3	46.0	105.72
00094576	AP02780	PR	02	01	SEP 6, 1988	AUG 9, 1988	2000	0900	1			3	79.0	96.69
00024709	AP02898	PR	02	01	OCT 4, 1988	SEP 6, 1988	0800	2000	1			3	68.0	.
00024710	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	0800	0800	1			3	83.0	63.42
00024714	AP02898	PR	02	01	NOV 27, 1988	NOV 1, 1988	0800	0800	1			3	85.0	105.81
00094580	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0800	0830	3			3	38.3	42.63

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L		CALCIUM MG/L	
00094440			510	D 46.00		4.10		****	2.95	1.17		0.58	
00094441			1247	24.00		4.47		****	2.00	0.60		0.46	
00094442			377	51.00	B	7.23		****	5.90	UG 1.99	B	4.60	
00094455	AC		844	26.00	UG	6.62		****	4.40	0.97	UG	1.42	
00094540	F		1428	30.50	B	6.83		****	5.45	UG 1.10	B	1.44	
00094568	JFE		****	****		****		****	****	****		****	
00094569	EFJ		****	****		****		****	****	****		****	
00094570			1579	43.00		4.09		****	5.70	0.69		0.36	
00094576			2480	43.00		4.02		****	4.75	0.50		0.16	
00024709	E	N	.	****		****		****	****	****		****	
00024710			1695	14.00		4.71		****	1.70	0.32		0.42	
00024714	QIF	Z	2838	12.00	UG	4.74		****	1.20	LG 0.25		0.16	
00094580	EI		517	36.00		4.31		****	2.55	UG 0.81	UG	0.54	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=DALHOUSIE MILLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00094440	0.51	0.470	0.060	0.035	0.220	0.350	<T 0.004	0.009
00094441	0.43	0.270	0.050	<T 0.020	0.300	0.220	<T 0.002	0.004
00094442	B 2.52	1.150	UG 0.410	0.085	B 1.700	0.900	0.015	0.005
00094455	0.45	UG 1.850	UG 0.240	UG 0.165	0.320	1.080	UG 0.101	B 0.025
00094540	D 0.39	UG 1.950	B 0.210	UG 0.385	B 0.195	UG 1.660	UG 0.147	UG 0.009
00094568	****	****	****	****	****	****	****	****
00094569	****	****	****	****	****	****	****	****
00094570	0.10	0.900	0.055	0.075	0.035	0.760	0.012	0.004
00094576	0.13	0.560	<T 0.025	0.030	0.025	0.450	0.010	0.003
00024709	****	****	****	****	****	****	****	****
00024710	0.11	0.350	0.045	0.045	0.035	0.256	0.015	0.002
00024714	0.09	LG 0.170	<T 0.020	0.025	0.035	0.136	<T 0.002	0.001
00094580	UG 0.39	0.390	UG 0.075	0.045	UG 0.190	0.264	<T 0.008	UG 0.010

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00094440	0.0010	1DT 0.018	0.039	1DT 0.005	D 0.0009	1DT 0.033	1DT 0.0008	D 115.00
00094441	0.0004	1DT 0.009	0.025	1DT 0.001	0.0004	1DT 0.013	< 0.0004	58.90
00094442	0.0010	1DT 0.019	B 0.148	< 0.004	0.0005	0.058	< 0.0007	B 15.60
00094455	<W 0.0010	D 0.036	<T 0.066	<W 0.002	<T 0.0008	<T 0.024	1DT 0.0009	LG 19.80
00094540	<T 0.0020	D 0.022	1DT 0.127	1DT 0.020	<T 0.0004	<T 0.039	1DT 0.0015	LG 24.60
00094568	****	****	****	****	****	****	****	****
00094569	****	****	****	****	****	****	****	****
00094570	<W 0.0010	<T 0.009	0.031	<T 0.016	<T 0.0004	<T 0.008	1DT 0.0003	114.00
00094576	<W 0.0010	B 0.039	0.021	<T 0.021	<T 0.0004	<T 0.007	1DT 0.0003	128.00
00024709	****	****	****	****	****	****	****	****
00024710	<T 0.0002	0.007	1DT 0.005	|BL ****	<T 0.0002	0.013	0.0012	43.30
00024714	<T 0.0001	0.003	<W 0.005	|BL ****	<T 0.0002	0.014	1DT 0.0004	LG 39.10
00094580	<T 0.0009	UG 0.019	<T 0.057	1DT 0.002	UG 0.0006	0.049	<T 0.0018	75.90

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=GOLDEN LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00094445	AP02548	PR	02	01	JAN 25, 1988	DEC 29, 1987	0720	0700	3			2	38.0	77.97
00094447	AP02546	PR	02	01	FEB 23, 1988	JAN 25, 1988	0830	0720	3			2	45.0	62.56
00094453	AP02558	PR	02	01	MAR 23, 1988	FEB 23, 1988	0700	0835	1			2	12.0	98.05
00094456	AP02558	PR	02	01	APR 19, 1988	MAR 23, 1988	0700	0705	1			2	64.0	86.91
00094541	AP02639	PR	02	01	MAY 17, 1988	APR 19, 1988	0700	0700	1			3	76.0	81.62
00094571	AP02780	PR	02	01	JUN 14, 1988	MAY 17, 1988	0730	0705	1			3	28.0	97.79
00094573	AP02780	PR	02	01	JUL 12, 1988	JUN 14, 1988	0700	0735	1			3	72.0	95.31
00094574	AP02780	PR	02	01	AUG 15, 1988	JUL 12, 1988	1830	0700	1			3	135.0	94.09
00024711	AP02898	PR	02	01	SEP 6, 1988	AUG 15, 1988	0800	1835	1			3	66.0	70.28
00024712	AP02898	PR	02	01	OCT 4, 1988	SEP 6, 1988	0800	0800	1			3	61.0	43.73
00024713	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	0700	0800	1			3	51.0	94.69
00094578	AP02961	PR	02	01	NOV 28, 1988	NOV 1, 1988	0700	0705	1			3	58.2	60.48
00094579	AP02961	PR	02	01	DEC 28, 1988	NOV 28, 1988	0800	0705	3			2	1.3	2283.9

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00094445			962	29.50	4.24	****	1.85	0.66	<T 0.08
00094447			914	25.50	4.33	****	1.15	0.62	0.14
00094453			382	48.00	4.22	****	3.55	1.39	0.74
00094456			1806	36.00	4.26	****	3.10	0.71	0.38
00094541			2014	33.00	4.31	****	3.50	0.71	0.36
00094571			889	30.00	4.20	****	2.35	0.55	0.18
00094573			2228	20.00	4.51	****	2.35	0.35	0.20
00094574	Q	Z	4124	43.50	4.05	****	5.20	0.47	0.16
00024711		Z	1499	16.00	4.54	****	1.45	0.22	<T 0.04
00024712		N	843	19.00	4.55	****	2.00	0.34	0.30
00024713			1561	25.00	4.34	****	1.65	0.50	0.12
00094578	P		1132	26.00	4.29	****	2.55	0.51	0.14
00094579	P	Z	952	17.00	UG 4.59	****	1.00	0.44	0.20

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=GOLDEN LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00094445	0.13	0.450	<T 0.015	<T 0.020	0.050	0.240	<T 0.005	0.002
00094447	0.18	0.230	<T 0.020	<T 0.010	0.095	0.100	<T 0.007	0.002
00094453	0.35	0.780	0.090	<T 0.020	0.150	0.710	<T 0.008	0.012
00094456	0.17	0.450	0.050	<T 0.010	0.055	0.410	<T 0.006	0.003
00094541	0.11	0.620	0.070	0.045	0.030	0.576	<T 0.005	0.005
00094571	<T 0.03	0.360	0.035	0.075	<T 0.025	0.236	0.015	0.003
00094573	0.12	0.600	0.030	0.050	<T 0.025	0.546	0.013	0.004
00094574	0.06	0.550	0.030	0.045	0.035	0.546	<T 0.007	<T 0.002
00024711	<T 0.05	0.210	<T 0.005	<T 0.015	<T 0.010	0.180	<W 0.002	0.001
00024712	0.09	0.340	0.040	<T 0.020	0.030	0.286	<W 0.002	0.003
00024713	0.08	0.230	<T 0.020	UG 0.115	0.035	0.170	<T 0.003	0.003
00094578	0.14	0.400	<T 0.015	0.025	0.055	0.246	<T 0.006	0.002
00094579	0.16	LG 0.150	0.030	0.025	0.065	LG 0.098	<T 0.004	0.003

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00094445	0.0002	1DT 0.003	0.013	0.005	< 0.0004	1DT 0.011	< 0.0004	81.80
00094447	0.0002	1DT 0.003	0.019	1DT 0.003	< 0.0004	1DT 0.011	< 0.0004	75.50
00094453	<W 0.0010	0.020	0.075	<T 0.014	<T 0.0004	0.034	<T 0.0008	98.80
00094456	<W 0.0010	<T 0.008	<T 0.014	1DT 0.003	<T 0.0005	<T 0.008	1DT 0.0002	90.10
00094541	<W 0.0010	<T 0.007	1DT 0.045	1DT 0.016	<T 0.0004	<T 0.015	<T 0.0010	88.20
00094571	<T 0.0053	1DT 0.004	<T 0.014	1DT 0.011	<T 0.0004	<T 0.011	1DT 0.0003	89.30
00094573	<W 0.0010	<T 0.005	<T 0.029	1DT 0.005	<T 0.0004	<T 0.008	1DT 0.0002	53.30
00094574	<W 0.0010	<T 0.003	<T 0.023	<T 0.013	<T 0.0004	<T 0.006	1DT 0.0001	119.00
00024711	<W 0.0001	0.003	<W 0.007	1BL ****	<T 0.0001	0.014	1DT 0.0004	55.80
00024712	<T 0.0002	0.008	<W 0.009	1BL ****	<T 0.0000	0.017	1DT 0.0005	53.60
00024713	<T 0.0002	0.004	<W 0.007	1BL ****	<T 0.0003	0.019	1DT 0.0005	72.40
00094578	<T 0.0005	0.004	<T 0.016	1DT 0.002	UG 0.0005	0.026	0.0021	75.40
00094579	<T 0.0009	0.004	<T 0.029	1DT 0.001	<T 0.0002	0.017	<T 0.0012	LG 42.60

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=SMITHS FALLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00094437	AP02548	PR	02	01	JAN 26, 1988	DEC 30, 1987	0940	1545	2			2	30.0	23.82
00094438	AP02548	PR	02	01	FEB 23, 1988	JAN 26, 1988	0945	0940	2			2	79.0	47.33
00094439	AP02548	PR	02	01	MAR 22, 1988	FEB 23, 1988	1145	0945	3			2	11.0	117.32
00066001	AP02639	PR	02	01	APR 19, 1988	MAR 22, 1988	1115	1147	1			3	47.0	80.87
00066002	AP02639	PR	02	01	MAY 17, 1988	APR 19, 1988	0948	1115	1			3	46.0	84.77
00094566	AP02780	PR	02	01	JUN 14, 1988	MAY 17, 1988	0958	0948	1			3	36.0	74.95
00094567	AP02780	PR	02	01	JUL 12, 1988	JUN 14, 1988	1134	0958	1			3	53.0	94.55
00094575	AP02780	PR	02	01	AUG 9, 1988	JUL 12, 1988	0922	1134	1			3	38.0	87.05
00024706	AP02898	PR	02	01	SEP 6, 1988	AUG 9, 1988	1057	0922	1			3	93.0	18.88
00024707	AP02898	PR	02	01	OCT 4, 1988	SEP 6, 1988	0956	1057	1			3	85.0	90.91
00024708	AP02898	PR	02	01	NOV 1, 1988	OCT 4, 1988	1100	0956	1			3	70.0	87.87
00024717	AP02940	PR	02	01	NOV 29, 1988	NOV 1, 1988	1023	1100	1			3	88.0	80.57
00069045	AP03018	PR	02	01	DEC 29, 1988	NOV 29, 1988	1245	1023	1			2	30.0	80.08

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00094437		NH	232	33.50	B	7.12	****		D	5.35		1.42	B	2.36	
00094438		N	1214	23.50		4.47	****			1.90		0.66		0.68	
00094439			419	47.50		4.26	****			4.75		1.47	UG	1.44	
00066001			1234	37.00		4.26	****			3.50		0.83		0.46	
00066002			1266	31.50		4.42	****			3.60		0.66		0.42	
00094566	Q	HM	876	10.00	UG	5.39	****		LG	1.45	LG	0.19		0.38	
00094567			1627	13.00	UG	7.11	****			1.80		0.25	UG	1.20	
00094575	Q		1074	32.50		4.21	****			3.95		0.42		0.32	
00024706			****	****		****	****			****		****		****	
00024707			2075	29.00		4.31	****			2.80		0.37		0.14	
00024708			****	****		****	****			****		****		****	
00024717			2289	23.00		4.28	****			1.70		0.48		0.12	
00069045	Q	Z	755	12.00	UG	4.81	****			1.95		0.57	UG	0.56	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SE STATION=SMITHS FALLS MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00094437	0.69	D 0.920	B 0.860	0.075	D 0.460	D 0.700	<T 0.005	B 0.026
00094438	0.39	0.320	D 0.170	0.040	0.275	0.150	<T 0.005	0.003
00094439	UG 0.77	UG 1.570	UG 0.360	0.145	0.415	0.500	0.011	0.010
00066001	0.22	0.590	0.110	0.030	0.110	0.362	<T 0.004	0.006
00066002	0.11	0.660	0.105	0.035	0.035	0.546	<T 0.006	UG 0.006
00094566	<W 0.01	0.570	0.090	0.045	<T 0.020	0.400	0.020	0.004
00094567	0.09	0.450	B 0.540	0.050	0.030	0.196	0.019	<T 0.001
00094575	<T 0.04	0.660	0.070	0.030	<T 0.020	0.526	0.011	0.003
00024706	****	****	****	****	****	****	****	****
00024707	0.10	0.360	<T 0.025	<T 0.020	<T 0.020	0.320	<W 0.002	0.001
00024708	****	****	****	****	****	****	****	****
00024717	0.14	0.270	0.025	<T 0.010	0.050	0.206	<T 0.002	0.001
00069045	0.22	0.340	UG 0.190	UG 0.060	0.100	0.224	0.015	0.005

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00094437	0.0006	1DT 0.015	B 0.093	< 0.005	0.0004	1DT 0.037	< 0.0011	B 16.90
00094438	0.0005	1DT 0.012	0.026	1DT 0.004	0.0004	1DT 0.012	< 0.0004	59.20
00094439	0.0010	1DT 0.024	0.080	1DT 0.004	D 0.0011	0.058	< 0.0007	95.20
00066001	<W 0.0010	<T 0.007	<T 0.048	1DT 0.008	<T 0.0008	<T 0.013	<T 0.0009	97.70
00066002	<W 0.0010	<T 0.009	1DT 0.023	1DT 0.009	<T 0.0004	<T 0.009	<T 0.0011	73.30
00094566	<W 0.0010	1DT 0.003	1DT 0.021	1DT 0.013	<T 0.0004	<T 0.011	1DT 0.0003	LG 25.20
00094567	<W 0.0010	1DT 0.002	<T 0.011	<T 0.009	<T 0.0004	<T 0.008	1DT 0.0002	LG 13.80
00094575	<W 0.0010	<T 0.005	<T 0.027	1DT 0.014	<T 0.0004	<T 0.010	<T 0.0007	88.40
00024706	****	****	****	****	****	****	****	****
00024707	<T 0.0003	1DT 0.004	<W 0.006	|BL ****	<T 0.0001	0.012	1DT 0.0006	77.50
00024708	****	****	****	****	****	****	****	****
00024717	<T 0.0002	0.004	1DT 0.005	|BL ****	UG 0.0004	0.007	<T 0.0008	78.20
00069045	<T 0.0006	UG 0.013	<T 0.061	0.003	<T 0.0003	0.037	<T 0.0018	LG 36.60

PART VII

SOUTHWESTERN REGION
CUMULATIVE PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=ALVINSTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074474	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1230	1130	2			2	19.8	90.53
00074495	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1100	1230	3			2	66.6	95.59
00074504	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	1230	1100	3			2	21.1	75.32
00074523	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1340	1230	3			3	52.0	86.83
00074533	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	1100	1340	1			3	44.0	85.61
00074547	AP02631	PR	02	01	JUN 15, 1988	MAY 17, 1988	1030	1100	1			3	18.0	69.47
00074561	AP02679	PR	02	01	JUL 12, 1988	JUN 15, 1988	1030	1030	1			3	4.0	.
00074579	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	1100	1030	1			3	78.0	12.36
00074589	AP02788	PR	02	01	SEP 7, 1988	AUG 9, 1988	1100	1200	1			1	73.0	99.24
00074603	AP02834	PR	02	01	OCT 4, 1988	SEP 7, 1988	1300	1100	1			1	45.0	116.42
00074622	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	1130	1300	3			3	95.0	65.94
00074631	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	1200	1130	3			3	117.0	58.60
00074645	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	1300	1200	1			3	44.3	75.64

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L	
00074474		HM	582	28.00		4.29	****		2.70		0.71		1.06	
00074495			2067	32.00		4.26	****		2.15		0.79		0.24	
00074504		H	516	41.00	UG	6.93	****		6.35		1.77		2.94	
00074523	ABC		1466	33.00		4.88	****		5.30		1.07		1.32	
00074533	ACQ	H	1223	28.00	UG	6.53	****		5.75		0.91		1.56	
00074547	C		406	37.00		4.64	****		5.15		1.10		1.42	
00074561	EFK		****	****		****	****		****		****		****	
00074579	ABCQF		313	> 100.00	UG	7.71	****	UG	19.60	UG	1.73	U	9.23	
00074589			2352	48.00		3.98	****		5.55		0.61		0.30	
00074603	B		1701	21.50	B	7.14	****		3.30		0.37	D	1.82	
00074622	AB	H	2381	12.50	UG	6.10	****		2.85		0.52		1.36	
00074631		N	2261	24.50		4.25	****		3.75		0.58		0.62	
00074645	G	H	1397	20.00		4.62	****		3.25		0.39		0.62	

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=ALVINSTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074474	0.23	0.390	0.115	<T 0.015	0.080	0.290	<W 0.002	0.003
00074495	0.32	0.540	0.040	<T 0.010	0.090	0.400	<T 0.005	0.001
00074504	UG 1.25	UG 2.900	0.545	0.100	UG 0.800	1.020	0.020	0.015
00074523	0.47	1.350	0.265	UG 0.200	0.260	1.200	0.025	0.019
00074533	0.25	1.420	0.310	0.225	0.080	1.190	0.018	0.019
00074547	0.29	1.310	0.280	0.160	0.100	0.944	0.023	0.012
00074561	****	****	****	****	****	****	****	****
00074579	B 2.30	U 7.850	B 1.860	U 5.630	UG 0.520	2.370	U 0.785	<T 0.001
00074589	0.17	0.650	0.065	0.075	0.045	0.550	0.031	0.003
00074603	D 0.63	0.410	D 0.760	U 2.340	0.170	UCR 0.120	0.015	D 0.009
00074622	0.08	0.450	0.175	UG 0.260	0.030	0.330	UG 0.021	0.006
00074631	0.19	0.380	0.115	0.035	0.080	0.340	<T 0.004	0.003
00074645	0.54	1.290	0.115	UG 0.170	0.250	0.182	0.032	0.005

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074474	0.0003	1DT 0.019	0.029	1DT 0.016	< 0.0004	1DT 0.039	1DT 0.0019	89.30
00074495	< 0.0002	1DT 0.010	0.021	0.005	0.0008	1DT 0.016	1DT 0.0011	102.00
00074504	0.0006	1DT 0.024	0.119	1DT 0.003	0.0010	0.074	1DT 0.0005	LG 23.40
00074523	<W 0.0010	0.016	<T 0.103	<W 0.002	<T 0.0004	<T 0.042	1DT 0.0017	42.50
00074533	<W 0.0010	<T 0.012	<T 0.181	1DT 0.006	<T 0.0004	<T 0.067	<T 0.0025	LG 21.30
00074547	<W 0.0010	0.017	0.121	1DT 0.010	<T 0.0007	0.024	<T 0.0014	55.00
00074561	****	****	****	****	****	****	****	****
00074579	<T 0.0056	<T 0.031	B 0.459	1DT 0.093	<T 0.0005	<T 0.098	UG 0.0086	LG 14.90
00074589	<W 0.0010	<T 0.005	0.022	<T 0.017	<T 0.0004	<T 0.007	1DT 0.0002	130.00
00074603	<W 0.0010	0.022	<T 0.030	1DT 0.002	<T 0.0004	<T 0.008	<T 0.0005	45.00
00074622	<T 0.0003	0.004	<T 0.024	|BL ****	<T 0.0001	0.017	1DT 0.0004	LG 22.80
00074631	<T 0.0004	0.007	<T 0.017	|BL ****	UG 0.0005	0.027	<T 0.0010	85.60
00074645	<T 0.0011	0.017	<T 0.023	0.005	UG 0.0005	0.029	0.0043	51.90

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=COLCHESTER MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074470	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	0725	0740	3		1	2	27.0	67.04
00074491	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0800	0725	2			2	61.2	49.92
00074500	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	0800	0800	3	1		2	14.8	52.86
00074519	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1250	1240	3			3	30.0	186.96
00074534	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	0747	1250	1			3	14.0	103.84
00074552	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	0618	0747	1			3	21.0	66.59
00074569	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	0725	0618	1			3	16.0	96.63
00074576	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	0708	0741	1			3	79.0	99.11
00074585	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	0720	0708	1			1	88.0	84.98
00074599	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	1120	0725	1			1	53.0	97.98
00074618	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	0740	1120	3			3	68.0	89.82
00074627	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	0750	0750	1			3	98.0	90.86
00074641	AP02961	PR	02	01	DEC 27, 1988	NOV 29, 1988	0800	0800	3			3	19.8	122.11

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L
00074470			587	22.50	4.38		****		1.95		0.46		0.26
00074491		N	992	35.00	4.21		****		2.70		0.73		0.22
00074500	A		254	37.00	4.40		****		3.70		0.93		0.94
00074519	A	N	1821	34.50	4.38		****		4.50		0.81		0.86
00074534	A		472	47.50	6.63	UG	****	D	9.50	UG	1.73		2.44
00074552	A		454	23.00	4.94		****		4.00		0.51		0.50
00074569			502	31.00	7.07	B	****		6.20		0.85		2.76
00074576			2542	51.50	4.06		****		5.85		0.69		0.68
00074585	A		2428	35.50	4.33		****		4.85		0.64		0.50
00074599	Q	HM	1686	16.00	4.77		****		3.00		0.35		0.52
00074618	AC		1981	18.00	4.51		****		2.75		0.50		0.60
00074627			2841	24.00	4.38		****		2.10		0.37		0.26
00074641			753	24.00	4.61		****		4.05		0.74		1.44

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=COLCHESTER MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074470	0.27	0.220	0.060	<T 0.020	0.075	0.190	<W 0.002	0.002
00074491	0.44	0.480	0.045	<T 0.015	0.150	0.340	<T 0.004	0.002
00074500	0.90	0.910	0.220	0.040	0.300	0.690	<T 0.009	0.006
00074519	0.29	0.870	0.140	0.050	0.175	0.700	0.012	0.007
00074534	0.65	0.850	0.535	D 0.415	D 0.225	D 2.360	D 0.149	0.023
00074552	0.16	1.980	0.105	0.145	0.090	1.010	0.065	0.006
00074569	0.29	0.920	0.720	0.070	0.050	0.658	0.017	0.004
00074576	0.17	0.660	0.205	0.040	0.030	0.580	<T 0.004	0.003
00074585	0.18	0.780	0.110	0.070	0.040	0.750	0.031	0.005
00074599	0.15	0.550	0.140	UG 0.920	0.085	0.390	D 0.137	<T 0.002
00074618	0.08	0.500	0.095	0.040	<T 0.025	0.446	<T 0.004	0.004
00074627	0.18	0.300	0.040	<T 0.020	0.045	0.250	<T 0.002	0.002
00074641	0.84	0.440	0.225	0.040	0.310	0.308	<T 0.005	0.007

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074470	< 0.0002	1DT 0.035	0.022	1DT 0.011	< 0.0004	1DT 0.020	1DT 0.0010	71.50
00074491	< 0.0002	1DT 0.021	0.026	0.010	0.0005	1DT 0.025	< 0.0004	108.00
00074500	0.0006	1DT 0.026	0.083	0.039	0.0007	0.056	< 0.0010	77.80
00074519	<W 0.0010	0.016	<T 0.039	1DT 0.005	<T 0.0004	<T 0.023	1DT 0.0005	75.20
00074534	<W 0.0010	0.040	0.185	1DT 0.007	<T 0.0004	<T 0.062	<T 0.0019	27.80
00074552	<W 0.0010	0.019	<T 0.058	1DT 0.016	<T 0.0008	<T 0.016	<T 0.0025	39.50
00074569	<W 0.0010	0.040	1DT 0.150	1DT 0.042	<T 0.0004	<T 0.045	<T 0.0023	LG 15.40
00074576	<W 0.0010	<T 0.007	0.036	<T 0.012	<W 0.0001	<T 0.007	1DT 0.0003	111.00
00074585	<W 0.0010	<T 0.007	0.029	<T 0.019	<T 0.0004	<T 0.007	1DT 0.0003	84.30
00074599	<W 0.0010	<T 0.006	<T 0.010	<W 0.002	<T 0.0004	<T 0.008	1DT 0.0003	48.60
00074618	<T 0.0002	1DT 0.007	<T 0.036	|BL ****	<T 0.0001	0.023	1DT 0.0004	59.50
00074627	<W 0.0001	0.006	1DT 0.008	|BL ****	<T 0.0003	0.018	<T 0.0007	70.60
00074641	<T 0.0008	0.018	<T 0.062	0.003	UG 0.0004	0.074	<T 0.0013	47.90

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=MERLIN MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074471	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	0700	0900	3	1		2	21.7	35.34
00074492	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0700	0700	3			2	60.4	67.52
00074501	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	0700	0700	3			2	18.1	37.61
00074520	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	0700	0700	3			2	20.7	216.64
00074537	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	0700	0700	1			3	31.0	112.67
00074548	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	0700	0700	1			3	14.0	62.26
00074560	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	0700	0700	1			3	25.0	15.89
00074581	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	0700	0700	1			3	74.0	97.39
00074586	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	0700	0700	1			1	42.0	83.60
00074600	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	0700	0700	1			1	50.0	75.89
00074619	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	0700	0700	3			3	70.0	77.97
00074628	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	0700	0700	3			3	91.0	80.22
00074642	AP02961	PR	02	01	DEC 27, 1988	NOV 29, 1988	0700	0700	3		1	3	5.0	.

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00074471	G	HM	249	19.00	UG 7.35	****	1.55	LG 0.15	0.98
00074492			1324	33.00	4.26	****	2.50	0.73	0.28
00074501	G		221	43.00	4.40	****	4.60	1.25	1.38
00074520		NH	1456	27.00	4.69	****	4.10	0.69	1.10
00074537	AC		1134	36.50	4.54	****	6.25	1.09	1.22
00074548			283	32.50	4.93	****	5.90	0.86	1.44
00074560	C	N	129	91.00	3.83	****	10.20	1.27	1.50
00074581		C	2340	28.00	4.16	****	4.15	0.53	0.42
00074586	A		1140	48.00	4.03	****	5.70	0.70	0.46
00074600			1232	20.50	4.34	****	2.45	0.34	0.22
00074619			1772	22.50	4.40	****	3.20	0.60	0.54
00074628			1539	27.00	4.32	****	2.55	0.38	0.22
00074642	E		!NR ****	****	****	****	****	****	****

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=MERLIN MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074471	B 3.65	0.990	0.205	B 0.265	B 2.030	0.130	0.012	0.005
00074492	0.43	0.470	0.050	0.025	0.170	0.350	<T 0.005	0.002
00074501	1.08	1.020	0.235	0.040	0.595	0.710	<T 0.006	0.011
00074520	0.23	0.870	0.195	0.055	0.135	0.740	0.010	0.006
00074537	0.28	1.440	0.210	0.090	0.090	1.240	0.017	0.014
00074548	0.27	1.580	0.265	0.145	0.100	1.120	0.019	0.014
00074560	0.44	0.920	0.245	0.185	0.205	0.556	0.019	****
00074581	0.11	0.540	0.075	0.060	0.045	0.556	0.023	<T 0.001
00074586	0.16	0.750	0.075	0.055	0.030	0.636	0.019	0.005
00074600	0.09	UCR 0.280	0.040	<W 0.005	0.050	0.295	<W 0.002	<T 0.001
00074619	<W 0.01	0.650	0.100	0.040	0.025	0.546	<T 0.004	0.005
00074628	0.17	0.360	0.035	0.050	0.055	0.270	<T 0.009	0.002
00074642	****	****	****	****	****	****	****	****

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074471	0.0022	1DT 0.085	0.081	1DT 0.017	< 0.0004	1DT 0.018	B 0.0090	LG 16.90
00074492	< 0.0002	1DT 0.013	0.028	0.004	0.0005	1DT 0.022	< 0.0004	103.00
00074501	0.0012	1DT 0.034	0.112	1DT 0.032	0.0008	0.078	1DT 0.0013	84.30
00074520	<W 0.0010	<T 0.010	<T 0.037	<W 0.002	<T 0.0004	<T 0.019	1DT 0.0005	47.40
00074537	<W 0.0010	0.018	<T 0.112	1DT 0.035	<T 0.0004	0.069	1DT 0.0012	61.70
00074548	<W 0.0010	0.027	0.122	1DT 0.025	<T 0.0004	0.038	<T 0.0010	39.80
00074560	****	****	****	****	****	****	****	197.00
00074581	<W 0.0010	<T 0.006	0.025	1DT 0.009	<T 0.0004	<T 0.007	1DT 0.0002	97.60
00074586	<W 0.0010	<T 0.016	0.032	1DT 0.001	<T 0.0004	<T 0.009	<T 0.0011	130.00
00074600	<W 0.0010	1DT 0.001	<T 0.012	<W 0.002	<T 0.0004	<T 0.009	0.0060	70.00
00074619	<T 0.0002	1DT 0.007	<T 0.039	|BL ****	<T 0.0001	0.023	UG 0.0036	68.40
00074628	<T 0.0001	0.006	1DT 0.006	|BL ****	<T 0.0003	0.020	<T 0.0010	78.40
00074642	****	****	****	****	****	****	****	****

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=PALMERSTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074475	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	0915	1300	2			2	20.7	88.09
00074499	AP02483	PR	02	01	FEB 24, 1988	JAN 26, 1988	1215	0915	3			2	53.6	60.97
00074505	AP02533	PR	02	01	MAR 22, 1988	FEB 24, 1988	1300	1215	3			2	27.8	49.41
00074524	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1300	1300	3			2	43.0	34.60
00074538	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	1110	1300	1			3	55.0	91.11
00074554	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	1300	1110	1			3	35.0	45.85
00074567	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	1300	1300	1			3	20.0	49.59
00074583	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	1300	1300	1			3	70.0	95.92
00074590	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	1300	1300	1		1	1	43.0	78.36
00074604	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	1130	1300	1		1	1	112.0	61.60
00074623	AP02886		02	01	NOV 1, 1988	OCT 4, 1988	1300	1130	3			3	108.0	.
00074632	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	1330	1300	3		1	3	90.0	3.39
00074646	AP02961	PR	02	01	DEC 29, 1988	NOV 29, 1988	0945	1330	1			3	59.9	7.71

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML		CONDUCT UMHO/CM		LAB.PH		ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L		CALCIUM MG/L
00074475			592		20.00	UG	7.20	****			3.80		0.68		2.04
00074499			1061		24.50		4.53	****			2.60		0.66		0.46
00074505		N	446		40.50	UG	7.35	****			5.55		1.37		2.98
00074524	F		483	D	58.50	UG	7.32	****		UG	8.55		1.78	D	3.26
00074538	F		1627		23.50	UG	6.21	****			4.20		0.78		0.98
00074554		N	521		23.50	UG	7.33	****			3.35		0.48		0.70
00074567		N	322		53.00		4.60	****			9.75		1.37		2.36
00074583		X	2180		****		****	****			****		****		****
00074590			1094		40.00		4.08	****			4.80		0.66		0.28
00074604		HM	2240		23.00		4.33	****			3.15		0.39		0.40
00074623	FEI		****		****		****	****			****		****		****
00074632		N	110		25.00		4.34	****		UG	5.25		0.63		0.82
00074646	F	Z	****		****		****	****			****		****		****

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=PALMERSTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074475	0.44	0.780	0.620	0.040	0.245	0.190	0.090	UG 0.032
00074499	0.39	0.620	0.120	<T 0.015	0.190	0.450	0.016	0.003
00074505	UG 1.11	1.670	0.845	0.105	0.710	0.830	D 0.052	0.013
00074524	D 0.82	UG 2.550	D 0.925	UG 0.245	D 0.545	UG 2.000	0.039	0.007
00074538	0.19	1.460	0.195	0.085	0.085	1.190	0.026	0.012
00074554	0.12	2.080	0.285	0.105	0.030	1.640	0.030	0.003
00074567	0.45	1.970	0.470	0.200	0.200	1.570	0.018	0.021
00074583	****	****	****	****	****	****	****	****
00074590	0.09	0.790	0.070	0.030	<T 0.020	0.710	0.018	<T 0.002
00074604	0.05	0.550	0.040	0.110	<T 0.025	0.515	<T 0.005	<T 0.001
00074623	****	****	****	****	****	****	****	****
00074632	0.32	0.840	0.150	0.080	0.175	UG 0.780	<T 0.003	0.007
00074646	****	****	****	****	****	****	****	****

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074475	0.0009	0.027	UG 0.927	1DT 0.017	0.0007	UG 0.769	0.0012	LG 17.40
00074499	< 0.0002	1DT 0.022	0.058	0.006	0.0006	1DT 0.024	1DT 0.0006	70.30
00074505	0.0018	0.043	UG 0.264	1DT 0.012	0.0009	0.149	1DT 0.0021	LG 21.50
00074524	<W 0.0010	0.054	1DT 0.139	<W 0.003	<T 0.0004	D 0.078	B 0.0098	LG 19.40
00074538	<W 0.0010	0.017	<T 0.071	1DT 0.004	<T 0.0004	<T 0.030	1DT 0.0012	LG 22.30
00074554	<W 0.0010	1DT 0.002	<T 0.044	0.025	< 0.0004	<T 0.015	1DT 0.0005	LG 16.20
00074567	<W 0.0010	<T 0.016	UG 0.259	1DT 0.047	<T 0.0004	0.083	0.0048	62.30
00074583	****	****	****	****	****	****	****	****
00074590	<W 0.0010	<T 0.005	<T 0.029	<T 0.025	<T 0.0004	<T 0.010	1DT 0.0004	111.00
00074604	<W 0.0010	1DT 0.001	<T 0.014	1DT 0.006	<T 0.0004	<T 0.007	<T 0.0007	72.00
00074623	****	****	****	****	****	****	****	****
00074632	UG 0.0018	0.043	1DT 0.054	|BL ****	UG 0.0007	0.124	UG 0.0166	85.70
00074646	****	****	****	****	****	****	****	****

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=PORT STANLEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074472	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1100	0930	3			2	22.9	75.99
00074493	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	0940	1100	3			2	53.5	70.81
00074502	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	0900	0940	3	1		2	20.7	63.09
00074521	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1530	0900	3			3	52.0	88.91
00074539	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	0900	1530	1			3	40.0	93.17
00074545	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	1030	0900	1			3	25.0	66.16
00074562	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	0930	1030	1			3	3.0	65.71
00074580	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	0900	0930	1			3	90.0	46.34
00074587	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	1330	0900	1			1	54.0	80.42
00074601	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	1000	1330	1			1	46.0	75.46
00074620	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	0945	1000	3			3	85.0	90.81
00074629	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	0930	0945	3	1		3	108.0	49.65
00074643	AP02961	PR	02	01	DEC 28, 1988	NOV 29, 1988	0930	0930	1		1	3	66.8	62.06

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00074472		C	565	UG 89.50	U 8.03	****	6.00	1.69	U 14.10
00074493			1230	22.50	6.88	****	3.60	1.05	2.16
00074502		C	424	44.50	7.31	****	5.30	1.16	4.36
00074521			1501	34.50	4.51	****	5.35	0.93	1.32
00074539			1210	33.50	UG 4.86	****	6.65	1.05	1.74
00074545			537	39.00	4.34	****	5.35	0.86	1.02
00074562			64	> 100.00	4.43	****	U 30.60	U 4.15	U 9.20
00074580	F		1354	26.50	4.21	****	3.30	0.47	0.42
00074587			1410	36.50	4.29	****	6.15	0.78	1.34
00074601		HCM	1127	32.00	4.30	****	6.25	0.90	1.48
00074620	FMI	H	2499	UG 19.00	4.81	****	3.45	0.66	0.58
00074629	F		1748	23.00	4.23	****	3.35	0.50	0.34
00074643	Q		1304	18.00	6.96	****	3.30	0.58	1.81

ONTARIO MINISTRY OF THE ENVIRONMENT
AP10S - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=PORT STANLEY MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074472	UG 1.11	0.300	0.510	0.060	0.495	0.100	0.021	U 0.430
00074493	0.59	0.620	0.390	0.030	0.335	0.430	0.020	0.017
00074502	0.57	0.770	0.635	0.045	0.305	0.530	0.020	0.002
00074521	0.31	1.150	0.220	0.080	0.165	0.960	0.028	0.013
00074539	0.27	1.260	0.315	0.110	0.100	1.160	0.021	0.019
00074545	0.22	0.930	0.200	0.110	0.090	0.734	0.012	0.010
00074562	UG 1.68	!IS ****	UG 1.890	UG 0.540	UG 0.795	!IS ****	!IS ****	****
00074580	0.12	0.430	0.065	0.025	0.050	0.336	<T 0.004	0.008
00074587	0.13	0.730	0.270	0.065	0.030	0.666	0.023	0.009
00074601	0.36	1.260	0.305	0.115	0.165	1.100	0.075	0.010
00074620	0.07	1.140	0.140	0.410	0.085	0.876	0.102	0.006
00074629	0.18	0.290	0.065	0.030	0.060	0.266	<T 0.004	0.003
00074643	0.46	0.200	0.490	0.030	0.215	0.076	0.017	0.010

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074472	0.0061	0.016	U 1.432	1DT 0.016	0.0011	UG 0.962	0.0033	<W 1.00
00074493	0.0002	1DT 0.009	0.058	1DT 0.005	0.0008	0.034	< 0.0004	22.30
00074502	0.0014	1DT 0.015	UG 0.244	1DT 0.019	0.0007	0.106	< 0.0007	18.50
00074521	<W 0.0010	0.015	0.047	<W 0.002	<T 0.0004	0.028	1DT 0.0005	63.80
00074539	<T 0.0011	0.023	<T 0.163	1DT 0.002	<T 0.0004	0.065	<T 0.0022	44.60
00074545	<W 0.0010	0.030	0.158	1DT 0.008	<T 0.0004	0.054	<T 0.0011	79.70
00074562	****	****	****	****	****	****	****	117.00
00074580	<W 0.0010	<T 0.004	<T 0.028	1DT 0.027	< 0.0004	<T 0.009	1DT 0.0002	78.50
00074587	<W 0.0010	<T 0.008	0.048	0.036	<T 0.0004	<T 0.009	1DT 0.0002	81.70
00074601	<W 0.0010	0.013	0.045	<W 0.002	<T 0.0004	<T 0.009	<T 0.0012	91.40
00074620	<T 0.0002	0.007	<T 0.036	|BL ****	<T 0.0001	0.026	<T 0.0006	42.40
00074629	<T 0.0002	0.007	<T 0.018	|BL ****	<T 0.0003	0.027	<T 0.0010	82.80
00074643	<T 0.0007	0.005	<T 0.083	1DT 0.001	UG 0.0005	0.062	<T 0.0008	19.50

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=SHALLOW LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00040980	AP02468	PR	02	01	JAN 26, 1988	DEC 29, 1987	0905	1100	3			0	72.0	74.60
00084077	AP02475	PR	02	01	FEB 23, 1988	JAN 26, 1988	0950	0950	3			2	49.0	121.00
00084240	AP02507	PR	02	01	MAR 22, 1988	FEB 23, 1988	1100	0950	2			2	39.5	67.92
00084307	AP02551	PR	02	01	APR 19, 1988	MAR 22, 1988	1130	1100	1			2	73.0	82.82
00084409	AP02601	PR	02	01	MAY 17, 1988	APR 19, 1988	0950	1130	1			0	107.5	15.10
00084474	AP02646	PR	02	01	JUN 14, 1988	MAY 17, 1988	1250	0950	1			3	21.5	42.26
00084529	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	1335	1250	1			0	35.0	56.85
00084552	AP02700	PR	02	01	AUG 9, 1988	JUL 12, 1988	1220	1335	1			3	97.6	41.17
00084647	AP02761	PR	02	01	SEP 6, 1988	AUG 9, 1988	1520	1220	1			0	140.0	100.43
00084821	AP02819	PR	02	01	OCT 4, 1988	SEP 6, 1988	1355	1525	1		1	3	132.0	94.13
00084906	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	1400	1400	3	1	1	*	131.0	86.97
00042008	AP02897	PR	02	01	NOV 29, 1988	NOV 1, 1988	1630	1400	3			2	82.0	98.52
00042135	AP02940	PR	02	01	DEC 27, 1988	NOV 29, 1988	1405	1635	2			2	90.9	67.06

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00040980			1744	20.00	4.50	****	2.00	0.67	0.52
00084077	F		1925	30.00	4.31	****	2.55	0.86	0.68
00084240	G	HCM	871	12.00	4.38	****	0.95	0.27	0.23
00084307	ACD		1963	31.00	4.58	****	3.90	0.81	0.82
00084409	FACD		527	56.50	4.03	****	5.45	1.19	0.78
00084474	ABDFJ	HM	295	44.00	UG 7.30	****	6.30	0.72	2.94
00084529	CAF		646	52.50	4.62	****	9.30	1.60	2.68
00084552	ACDJ	H	1305	29.00	UG 5.66	****	5.35	0.88	0.54
00084647			4565	20.00	4.40	****	D 2.35	0.31	0.12
00084821			4034	20.00	4.33	****	2.50	0.36	0.12
00084906			3699	18.00	4.49	****	LG 1.70	0.43	0.18
00042008	Q	HM	2609	24.50	4.17	****	2.25	0.48	0.16
00042135			1968	21.00	4.42	****	1.95	0.46	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=SHALLOW LAKE MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00040980	0.23	0.470	0.120	<T 0.015	0.120	0.340	0.003	0.003
00084077	0.34	0.490	0.070	<T 0.025	0.210	0.360	<T 0.006	0.001
00084240	0.15	0.330	0.040	<T 0.010	0.040	0.100	0.013	0.002
00084307	0.24	1.040	0.135	0.060	0.150	0.840	0.023	0.006
00084409	0.26	0.740	0.120	0.035	0.100	0.625	<T 0.004	0.008
00084474	0.27	U 5.450	0.695	B 0.785	0.110	1.670	U 0.515	0.003
00084529	0.49	2.500	0.655	0.250	0.175	1.380	D 0.074	0.023
00084552	0.21	2.200	0.185	0.360	0.095	1.700	0.165	0.007
00084647	0.07	D 0.270	0.025	<T 0.025	<T 0.010	D 0.220	<W 0.002	<T 0.001
00084821	0.08	0.280	0.030	<T 0.015	<T 0.025	0.246	<W 0.002	<T 0.001
00084906	0.06	0.260	0.025	<T 0.010	<T 0.010	0.256	<W 0.002	<T 0.001
00042008	<W 0.01	0.290	<T 0.020	<T 0.015	0.045	0.246	<T 0.003	0.001
00042135	0.33	0.290	0.035	<T 0.020	0.065	0.226	<T 0.003	0.002

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00040980	< 0.0002	1DT 0.004	0.021	0.005	0.0008	0.014	1DT 0.0010	64.60
00084077	0.0006	1DT 0.009	0.018	0.007	0.0006	0.019	0.0017	83.60
00084240	0.0002	0.005	1DT 0.006	0.016	< 0.0004	< 0.011	1DT 0.0037	69.20
00084307	0.0013	1DT 0.009	0.037	D 0.017	< 0.0004	0.015	< 0.0003	60.30
00084409	<W 0.0010	0.021	0.039	<T 0.013	<T 0.0004	0.154	<T 0.0019	D 157.00
00084474	<W 0.0010	<T 0.035	0.239	1DT 0.055	<T 0.0004	<T 0.059	<T 0.0067	LG 24.50
00084529	<W 0.0010	0.035	<T 0.135	1DT 0.021	<T 0.0004	0.038	<T 0.0033	72.50
00084552	<W 0.0010	<T 0.007	<T 0.055	1DT 0.011	<T 0.0004	<T 0.019	1DT 0.0010	30.20
00084647	<W 0.0010	<T 0.003	<T 0.004	1DT 0.007	<W 0.0001	<T 0.006	1DT 0.0001	65.10
00084821	<W 0.0010	1DT 0.001	1DT 0.006	<W 0.001	<T 0.0004	<T 0.006	1DT 0.0002	75.70
00084906	<W 0.0010	<T 0.004	1DT 0.010	1DT 0.002	<T 0.0004	<T 0.006	1DT 0.0002	57.90
00042008	<T 0.0001	0.003	<T 0.008	|BL ****	<T 0.0003	0.008	<T 0.0005	100.00
00042135	<T 0.0001	0.005	1DT 0.009	|BL ****	<T 0.0003	0.015	<T 0.0010	63.30

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=WATERLOO MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074478	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1430	0830	2			2	26.0	111.71
00074498	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1100	1430	3			2	98.1	65.81
00074508	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	0930	1100	3			2	23.2	73.15
00074527	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1300	0930	3			3	55.0	99.68
00074540	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	1326	1300	1			3	65.5	59.84
00074542	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	1209	1326	1			3	18.0	49.96
00074556	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	0850	1215	1			3	15.0	124.23
00074575	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	1300	0850	1			3	139.0	73.28
00074593	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	1300	1330	1			1	128.0	90.31
00074607	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	1100	1300	1			1	43.0	103.07
00074626	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	1100	1100	3			3	92.0	80.35
00074635	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	1100	1100	3			3	88.0	108.67
00074649	AP02961	PR	02	01	DEC 27, 1988	NOV 29, 1988	1230	1100	3		1	3	37.5	106.36

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00074478		H	943	14.00	6.05	****	2.30	0.61	1.24
00074498			2096	27.00	4.37	****	2.20	0.66	0.34
00074508			551	24.00	4.79	****	3.15	0.88	0.92
00074527		H	1780	27.00	4.70	****	4.10	0.80	1.00
00074540	FP	H	1272	22.50	UG 5.01	****	4.30	0.64	0.72
00074542	FA		292	58.00	4.10	****	6.65	1.08	0.62
00074556		N	605	39.50	4.51	****	5.65	0.79	1.32
00074575			3307	36.50	4.19	****	3.75	0.48	0.34
00074593			3753	34.00	4.13	****	4.10	0.48	0.24
00074607			1439	28.00	4.29	****	3.90	0.51	0.48
00074626	Q	H	2388	UG 19.00	4.47	****	2.65	0.48	0.32
00074635			2626	26.00	4.35	****	2.30	0.30	0.12
00074649			1214	20.50	4.64	****	3.15	0.67	0.80

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=WATERLOO MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074478	0.45	0.570	0.255	0.075	0.245	0.290	0.024	0.015
00074498	0.31	0.450	0.055	<T 0.010	0.115	0.350	<T 0.006	0.001
00074508	0.44	1.190	0.165	0.080	0.190	0.800	0.034	0.005
00074527	0.24	1.070	0.195	0.055	0.130	0.880	0.016	0.013
00074540	0.15	1.100	0.150	0.050	0.045	0.934	0.018	0.012
00074542	0.28	1.500	0.140	0.090	0.080	1.260	0.014	0.005
00074556	0.21	1.110	0.265	0.090	0.070	0.870	0.015	0.010
00074575	0.09	0.580	0.055	0.030	0.035	0.496	<T 0.006	<T 0.002
00074593	0.20	0.490	0.045	<T 0.020	<T 0.015	0.476	0.017	<T 0.001
00074607	0.21	0.550	0.105	<T 0.020	0.095	0.550	<W 0.002	<T 0.002
00074626	<W 0.01	0.640	0.065	0.055	0.030	0.590	0.016	0.003
00074635	0.17	0.260	0.030	<T 0.020	0.060	0.240	<W 0.002	0.002
00074649	0.39	0.590	0.140	0.055	0.160	0.454	<T 0.009	0.008

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074478	0.0004	1DT 0.014	0.128	0.011	< 0.0004	0.106	0.0010	22.10
00074498	0.0004	1DT 0.002	0.018	0.007	0.0008	1DT 0.011	< 0.0003	86.30
00074508	0.0007	1DT 0.014	0.070	< 0.003	0.0008	0.028	< 0.0006	47.50
00074527	<W 0.0010	0.013	<T 0.039	1DT 0.002	<T 0.0004	<T 0.021	1DT 0.0004	50.30
00074540	<W 0.0010	0.012	<T 0.063	1DT 0.008	<T 0.0004	<T 0.028	1DT 0.0004	LG 36.30
00074542	<T 0.0019	0.016	0.058	1DT 0.021	<T 0.0004	<T 0.027	<T 0.0020	112.00
00074556	<W 0.0010	<T 0.012	0.105	1DT 0.030	<T 0.0004	<T 0.026	<T 0.0012	61.20
00074575	<W 0.0010	<T 0.004	<T 0.016	1DT 0.010	<W 0.0001	<T 0.007	1DT 0.0002	83.20
00074593	<W 0.0010	<T 0.004	<T 0.015	<T 0.006	<T 0.0004	<T 0.006	1DT 0.0002	97.60
00074607	<W 0.0010	<T 0.008	<T 0.015	<W 0.002	<T 0.0004	<T 0.008	<T 0.0009	73.30
00074626	<T 0.0004	1DT 0.006	<T 0.017	|BL ****	<T 0.0002	0.013	<T 0.0009	60.50
00074635	<T 0.0001	0.003	<W 0.006	|BL ****	<T 0.0003	0.013	<T 0.0008	69.20
00074649	<T 0.0009	0.012	<T 0.042	0.002	UG 0.0005	0.047	0.0021	45.70

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=WILKESPORT MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00074473	AP02461	PR	02	01	JAN 26, 1988	DEC 29, 1987	1600	1400	3			2	25.2	63.19
00074494	AP02483	PR	02	01	FEB 23, 1988	JAN 26, 1988	1130	1600	3			2	51.0	46.02
00074503	AP02533	PR	02	01	MAR 22, 1988	FEB 23, 1988	1530	1730	3			2	8.0	148.61
00074522	AP02579	PR	02	01	APR 19, 1988	MAR 22, 1988	1545	1530	3			2	36.6	102.92
00074541	AP02620	PR	02	01	MAY 17, 1988	APR 19, 1988	1530	1545	1			3	40.0	107.88
00074549	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	1500	1530	1			3	12.0	41.32
00074559	AP02679	PR	02	01	JUL 12, 1988	JUN 14, 1988	1400	1500	1			3	10.0	.
00074582	AP02721	PR	02	01	AUG 9, 1988	JUL 12, 1988	1600	1400	1			3	65.0	33.45
00074588	AP02788	PR	02	01	SEP 6, 1988	AUG 9, 1988	1500	1600	1			1	37.0	93.73
00074602	AP02834	PR	02	01	OCT 4, 1988	SEP 6, 1988	1400	1500	1			1	53.0	82.81
00074621	AP02886	PR	02	01	NOV 1, 1988	OCT 4, 1988	1500	1400	3			3	57.0	82.62
00074630	AP02917	PR	02	01	NOV 29, 1988	NOV 1, 1988	1400	1500	1	1		3	113.0	81.74
00074644	AP02961		02	01	DEC 28, 1988	NOV 29, 1988	1100	1400	3			3	11.7	.

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM		LAB.PH	ACIDITY.TFE		SULFATE MG/L		NITRATE MG/L	CALCIUM MG/L
00074473			517	26.50	UG	6.94	****		4.15		1.04	2.80
00074494		N	762	37.00		4.46	****		4.00		1.25	1.34
00074503		NH	386	25.00		4.83	****		3.40		0.75	1.12
00074522			1223	37.50		4.62	****		5.40		1.08	1.46
00074541		H	1401	28.00	UG	6.32	****		5.55		0.91	1.60
00074549		NH	161	56.00	UG	5.84	****	UG	11.80	UG	1.75	2.04
00074559	E		****	****		****	****		****		****	****
00074582	A	NHM	706	> 100.00	UG	7.51	****	UG	20.30		1.45	1.96
00074588			1126	47.00		4.01	****		5.80		0.63	0.34
00074602			1425	D 28.00		4.20	****		3.35		0.49	0.32
00074621			1531	20.00		4.61	****		3.25		0.66	0.70
00074630			2991	30.00		4.26	****		2.55		0.43	0.16
00074644	E		****	****		****	****		****		****	****

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=SW STATION=WILKESPORT MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE MG/L	KJELDAHL MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM MG/L	PHOSPHOR MG/L	MANGANESE MG/L
00074473	UG 1.12	0.650	0.400	0.050	0.640	0.400	<T 0.009	0.010
00074494	1.08	1.100	0.265	0.080	0.635	0.670	0.035	0.006
00074503	0.39	0.670	0.190	0.045	0.155	0.420	0.015	0.028
00074522	0.49	0.580	0.250	0.060	0.290	0.970	<T 0.008	0.012
00074541	0.42	1.330	0.335	0.110	0.085	1.150	0.014	0.017
00074549	0.64	UG 3.900	0.415	0.355	0.195	UG 3.090	0.202	0.012
00074559	****	****	****	****	****	****	****	****
00074582	UG 1.12	U 13.700	0.690	U 1.690	UG 0.610	U 8.780	U 0.990	<T 0.002
00074588	0.52	0.720	0.065	0.050	0.030	0.666	0.019	0.003
00074602	0.11	0.440	0.050	<T 0.010	0.045	0.425	<W 0.002	<T 0.002
00074621	<W 0.01	0.680	0.140	0.040	0.030	0.646	<T 0.003	0.007
00074630	0.20	0.340	0.030	0.025	0.055	0.330	<W 0.002	0.002
00074644	****	****	****	****	****	****	****	****

SAMPLE NUMBER	NICKEL MG/L	ZINC MG/L	IRON MG/L	LEAD MG/L	VANADIUM MG/L	ALUMINUM MG/L	COPPER MG/L	ACIDITY GRAN UG/L
00074473	0.0013	1DT 0.035	0.093	1DT 0.022	0.0005	0.061	0.0017	LG 17.90
00074494	D 0.0012	1DT 0.028	0.068	0.010	0.0011	0.074	1DT 0.0008	85.80
00074503	0.0012	0.057	UG 0.373	0.023	0.0013	0.121	1DT 0.0013	47.90
00074522	<T 0.0013	<T 0.008	<T 0.014	1DT 0.004	<T 0.0004	0.023	1DT 0.0003	60.00
00074541	<W 0.0010	0.025	<T 0.213	1DT 0.005	<T 0.0004	<T 0.087	1DT 0.0019	LG 21.70
00074549	B 0.0121	0.035	0.094	1DT 0.019	0.0013	0.046	UG 0.0107	28.10
00074559	****	****	****	****	****	****	****	****
00074582	<W 0.0010	B 0.083	0.108	<T 0.042	<T 0.0009	<T 0.032	0.0064	LG 21.20
00074588	<W 0.0010	<T 0.007	0.032	1DT 0.018	<T 0.0004	<T 0.009	1DT 0.0003	130.00
00074602	<W 0.0010	1DT 0.001	<T 0.019	<W 0.002	<T 0.0004	<T 0.009	<T 0.0012	93.40
00074621	<T 0.0003	1DT 0.007	<T 0.055	|BL ****	UG 0.0006	0.041	<T 0.0008	50.70
00074630	<T 0.0002	0.005	<W 0.005	|BL ****	<T 0.0003	0.015	<T 0.0009	83.90
00074644	****	****	****	****	****	****	****	****

PART VIII

QUéBEC INTERCOMPARISON SITE LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=Z STATION=SUTTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	SUBMISSION NUMBER	LIS SAMPLE TYPE	PROJECT CODE	SUB PROJECT CODE	SAMPLE REMOVAL DATE	EXPOSURE DATE	SAMPLE END HR	SAMPLE START HR	PREC. TYPE	PREC. AT EXP	PREC. AT REM.	GAUGE TYPE	GAUGE DEPTH(MM)	EFFICIENCY %
00075305	AP02451	PR	02	01	JAN 26, 1988	DEC 29, 1987	0950	1110	3		1	2	44.0	67.34
00075332	AP02523	PR	02	01	FEB 23, 1988	JAN 26, 1988	0945	1010	3	1	1	2	80.0	43.43
00075350	AP02523	PR	02	01	MAR 22, 1988	FEB 23, 1988	0945	0955	3	1		2	53.7	70.78
00075368	AP02572	PR	02	01	APR 19, 1988	MAR 22, 1988	0850	1000	2			0	71.3	96.59
00075376	AP02595	PR	02	01	MAY 17, 1988	APR 19, 1988	0945	1000	3			0	5.0	1375.5
00084123	AP02631	PR	02	01	JUN 14, 1988	MAY 17, 1988	0950	0945	1			2	29.0	33.50
00075378	AP02703	PR	02	01	JUL 12, 1988	JUN 14, 1988	1000	1000	1			2	107.0	95.39
00075380	AP02700	PR	02	01	AUG 9, 1988	JUL 12, 1988	0900	1000	1			1	114.0	85.43
00075381	AP02761	PR	02	01	SEP 6, 1988	AUG 9, 1988	0920	0910	1			1	160.0	89.32
00075382	AP02823	PR	02	01	OCT 4, 1988	SEP 6, 1988	0950	0930	1			2	30.9	216.20
00075383	AP02854	PR	02	01	NOV 1, 1988	OCT 4, 1988	0820	1005	3			*	110.0	54.90
00075384	AP02898	PR	02	01	NOV 29, 1988	NOV 1, 1988	1022	1000	3			2	90.0	157.76
00075385	AP02940	PR	02	01	DEC 27, 1988	NOV 29, 1988	0947	1035	3			2	94.0	33.26

SAMPLE NUMBER	FIELD COMMENTS	OFFICE COMMENTS	VOLUME ML	CONDUCT UMHO/CM	LAB.PH	ACIDITY.TFE	SULFATE MG/L	NITRATE MG/L	CALCIUM MG/L
00075305			962	22.50	4.35	****	1.50	0.58	0.22
00075332		N	1128	29.00	4.29	****	2.00	0.59	0.22
00075350			1234	40.50	4.12	****	2.75	0.92	0.26
00075368			2236	28.50	4.28	****	2.45	0.59	0.18
00075376	QP	HM	2233	UG 71.50	UG 7.74	****	5.10	0.52	0.50
00084123		H	316	26.00	4.91	****	4.00	0.62	UG 0.96
00075378			3314	22.00	4.37	****	2.40	0.33	0.18
00075380			3162	41.00	4.05	****	4.40	0.49	0.18
00075381			4640	34.50	4.13	****	4.05	0.46	0.14
00075382		NHCM	2169	26.00	4.05	****	3.50	0.42	0.16
00075383	P		1960	24.00	4.41	****	1.95	0.50	0.24
00075384	Q	N	4345	10.00	4.72	****	0.95	0.24	0.12
00075385	Q	N	1002	21.00	4.43	****	1.85	0.78	0.44

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
DATA LISTING
CUMULATIVE SAMPLING ANALYSIS RESULTS

---------- REGION=2 STATION=SUTTON MIC TYPE A SITE NO.1 ----------

SAMPLE NUMBER	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	PHOSPHOR	MANGANESE
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
00075305	0.20	0.230	<T 0.020	<W 0.005	0.095	0.120	0.012	0.002
00075332	0.46	0.290	0.025	0.030	0.110	0.220	0.012	0.002
00075350	0.23	0.490	0.030	0.030	0.115	0.380	0.013	0.006
00075368	0.15	0.400	0.030	<T 0.005	0.170	0.350	<T 0.006	<T 0.002
00075376	0.43	U 10.400	0.055	U 0.875	0.225	U 7.950	U 0.710	<T 0.001
00084123	0.23	1.280	UG 0.115	0.345	0.080	0.598	0.121	UG 0.017
00075378	0.07	0.350	0.030	0.030	<T 0.020	0.312	<T 0.006	0.003
00075380	0.08	0.590	0.030	<T 0.020	<T 0.020	0.502	<T 0.007	0.003
00075381	0.10	0.460	<T 0.025	0.030	<T 0.020	0.400	<W 0.002	<T 0.002
00075382	<W 0.01	0.440	<T 0.020	<T 0.020	0.025	0.370	<T 0.003	0.003
00075383	0.09	0.280	0.035	0.030	0.040	0.260	<W 0.002	<T 0.002
00075384	0.07	0.180	<T 0.005	<T 0.005	0.030	0.126	<W 0.002	0.001
00075385	0.27	0.460	0.045	<T 0.020	0.130	0.356	<T 0.006	0.004

SAMPLE NUMBER	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER	ACIDITY GRAN
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L
00075305	0.0002	1DT 0.006	1DT 0.011	1DT 0.003	0.0005	0.083	1DT 0.0003	75.50
00075332	0.0002	1DT 0.005	1DT 0.008	1DT 0.016	0.0005	1DT 0.008	< 0.0004	73.90
00075350	0.0003	1DT 0.006	0.015	0.006	0.0010	1DT 0.009	< 0.0004	101.00
00075368	<W 0.0010	<T 0.005	<T 0.010	<W 0.001	<T 0.0006	<T 0.007	1DT 0.0002	74.40
00075376	<W 0.0010	<T 0.017	<T 0.045	1DT 0.005	<T 0.0007	<T 0.026	1DT 0.0004	<T 2.38
00084123	<W 0.0010	0.016	0.140	1DT 0.032	< 0.0004	0.094	<T 0.0015	44.30
00075378	<W 0.0010	0.018	<T 0.010	1DT 0.003	<T 0.0004	0.032	<T 0.0004	57.50
00075380	<T 0.0025	<T 0.002	0.028	1DT 0.005	<T 0.0004	0.037	0.0027	99.50
00075381	<W 0.0010	<T 0.010	0.034	0.046	<T 0.0004	<T 0.006	1DT 0.0001	104.00
00075382	<W 0.0010	1DT 0.001	<T 0.012	<W 0.001	0.0035	<T 0.007	<T 0.0012	116.00
00075383	<W 0.0010	1DT 0.001	<T 0.017	<W 0.002	<T 0.0004	<T 0.008	<T 0.0008	63.30
00075384	<T 0.0002	1DT 0.002	<W 0.005	|BL ****	<T 0.0003	0.006	1DT 0.0002	42.60
00075385	<T 0.0003	0.008	<T 0.023	|BL ****	UG 0.0006	0.040	<T 0.0010	63.80

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